SAMSUNG TECHWIN

8 CHANNEL/
16 CHANNEL DVR

User Manual

SDE-4001/5001

CE

SAMSUNG

FEATURES

The DVR employs H.264 video encoding for 8 or 16 channel inputs and G.723 audio encoding for 8 or 16 channels while simultaneously supports hard disc recording and playback.
These DVRs also supports network connectivity, providing remote monitoring from a remote PC transferring video and audio data.

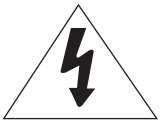
- Provides a convenient User Interface
- 8/16 CH Composite Input Connectors
- Supports CIF(S)/2CIF(M)/4CIF(L) recording formats
- With the network specific codec, network transfer enabled regardless of the recording conditions
- De-interlacing processor for better picture quality
- Display of HDD information and status by using HDD SMART
- 480(NTSC)/400(PAL)IPS: 16CH Model, 240(NTSC)/200(PAL)IPS: 8CH Model
- Hard Disk overwrite function
- Mass storage hard disk backup through high-speed USB 2.0
- Simultaneous Record and Playback of 8/16-channel video data
- Various Search Modes (Search by Time, Event, Backup and Motion Detection)
- Various Recording Modes (Time Lapse, Event, Scheduled Recording)
- Alarm Interface
- Remote Monitoring function by Network Viewer, Smart Viewer and Mobile Viewer

IMPORTANT SAFETY INSTRUCTIONS

Read these operating instructions carefully before using the unit.
Follow all the safety instructions listed below.
Keep these operating instructions handy for future reference.

1) Read these instructions.
2) Keep these instructions.
3) Heed all warnings.
4) Follow all instructions.
5) Do not use this apparatus near water.
6) Clean only with dry cloth.
7) Do not block any ventilation openings, Install in accordance with the manufacturer's instructions.
8) Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
9) Do not defeat the safety purpose of the polarized or grounding- type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
10) Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
11) Only use attachments/accessories specified by the manufacturer.
12) Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.

13) Unplug this apparatus during lightning storms or when unused for long periods of time.
14) Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.



CAUTION

RISK OF ELECTRIC SHOCK.
DO NOT OPEN

CAUTION : TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK) NO USER SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

This symbol indicates that dangerous voltage consisting a risk of electric shock is present within this unit.

This exclamation point symbol is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

WARNING

- To reduce the risk of fire or electric shock, do not expose this appliance to rain or moisture.
- To prevent injury, this apparatus must be securely attached to the floor/wall in accordance with the installation instructions.

WARNING

1. Be sure to use only the standard adapter that is specified in the specification sheet.
   Using any other adapter could cause fire, electrical shock, or damage to the product.
2. Incorrectly connecting the power supply or replacing battery may cause explosion, fire, electric shock, or damage to the product.
3. Do not connect multiple cameras to a single adapter. Exceeding the capacity may cause abnormal heat generation or fire.
4. Securely plug the power cord into the power receptacle. Insecure connection may cause fire.
5. When installing the camera, fasten it securely and firmly. The fall of camera may cause personal injury.
6. Do not place conductive objects (e.g. screwdrivers, coins, metal parts, etc.) or containers filled with water on top of the camera. Doing so may cause personal injury due to fire, electric shock, or falling objects.
7. Do not install the unit in humid, dusty, or sooty locations. Doing so may cause fire or electric shock.
8. If any unusual smells or smoke come from the unit, stop using the product. In such case, immediately disconnect the power source and contact the service center. Continued use in such a condition may cause fire or electric shock.
9. If this product fails to operate normally, contact the nearest service center. Never disassemble or modify this product in any way. (SAMSUNG is not liable for problems caused by unauthorized modifications or attempted repair.)
10. When cleaning, do not spray water directly onto parts of the product. Doing so may cause fire or electric shock.
11. Do not expose the product to the direct airflow from an air conditioner.
    Otherwise, it may cause moisture condensation inside the Clear Dome due to temperature difference between internal and external of the dome camera.
12. If you install this product in a low-temp area such as inside a cold store, you must seal up the wiring pipe with silicon, so that the external air can not flow inside the housing.
    Otherwise, external high, humid air may flow inside the housing, pooling moisture or vapor inside the product due to a difference between internal and external temperature.

BEFORE START

This user manual provides Information for using the DVR such as brief introduction, part names, functions, connection to other equipment, menu setup, etc.
You have to keep in mind the following notices :

- SAMSUNG retains the copyright on this manual.
- This manual cannot be copied without SAMSUNG's prior written approval.
- We are not liable for any or all losses to the product incurred by your use of non-standard product or violation of instructions mentioned in this manual.
- Prior to opening the case, please consult a qualified technician first. Whenever this is needed power must be removed from the unit.
- Before installing an additional HDD or connecting an external storage device (USB memory or USB HDD) to this DVR, check the compatibility. Consult your provider for the compatibility list.

Warning

❖ Battery

It is essential that when changing the battery in the unit, the replacement battery must be of the same type otherwise there may be a possibility of an explosion.
The following are the specifications of the battery you are using now.

- Normal voltage : 3V
- Normal capacity : 170mAh
- Continuous standard load : 0.2mA
- Operating temperature : -20°C ~ +85°C (-4°F ~ +185°F)

CALIFORNIA USA ONLY

This Perchlorate warning applies only to primary CR (Manganese Dioxide) Lithium coin cells in the product sold or distributed ONLY in California USA.
"Perchlorate Material - special handling may apply,
See www.dtsc.ca.gov/hazardouswaste/perchlorate."

- Connect the power cord into a grounded outlet.
- The Mains plug is used as a disconnect device and shall stay readily operable at any time.
- Batteries shall not be exposed to excessive heat such as sunshine, fire or the like.

❖ System Shutdown

Turning off the power while the product is in operation, or undertaking improper actions may cause damage or malfunction to the hard drive or the product.
Please turn off the power using the Power button on the front of your DVR.
After selecting <**OK**> in the pop-up menu, you can pull off the power cord.
You may want to install a UPS system for safe operation in order to prevent damage caused by an unexpected power stoppage. (Any questions concerning UPS, consult your UPS retailer.)

❖ Operating Temperature

The guaranteed operating temperature range of this product is 0°C ~ 40°C (32°F ~ 104°F).
This product may not work properly if you run right after a long period of storage at a temperature below the guaranteed one.
Prior to using a device that has been stored for a long period in low temperatures, allow the product to stand at room temperature for a period.
Especially for the built-in HDD in the product, its guaranteed temperature range is 5°C ~ 55°C (41°F ~ 131°F). Likewise, the hard drive may not work at a temperature below the guaranteed one.

❖ Ethernet Port

DVR is designed for indoor use only and all the communication wirings are limited to inside of the building.

- Do not connect UTP camera and BNC camera simultaneously. (CH1, CH2)

Standards Approvals

FC CE

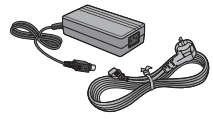
- This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment.
  This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

Package Contents

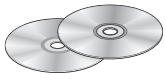
Please unwrap the product, and place the product on a flat place or in the place to be installed.
Please check the following contents are included in addition to the main unit.

Remote Control / Battery (AAA x 2)

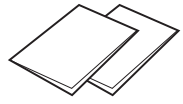
Mouse



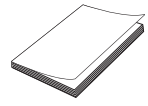
Adapter (2EA) / Power Cable (2EA)



Smart Viewer Software/
Manual CD *

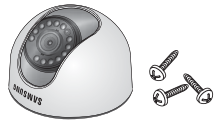


Quick Start Guide*/
Quick Network Setup Guide*



User Manual

SEB-1005R */Screws */
Camera Bracket *



SED-1001R */Screws *

Camera Cable */
Network Cable

Model	SYSTEM	SEB-1005R/ Screws/ Camera Bracket	SED-1001R/ Screws	Network Setup Guide	Quick Start Guide	Manual CD	Camera Cable
SDE-5001N US	NTSC	4/12/4	4/12	1	1	0	8
SDE-5001P EX	PAL	4/12/4	4/12	0	2	1	8
SDE-5001P UK	PAL	4/12/4	4/12	1	1	0	8
SDE-5001P AJ	PAL	4/12/4	4/12	0	2	1	8
SDE-4001N US	NTSC	4/12/4	2/6	1	1	0	6
SDE-4001P EX	PAL	2/6/2	2/6	0	2	1	4
SDE-4001P UK	PAL	2/6/2	2/6	1	1	0	4
SDE-4001P AJ	PAL	2/6/2	2/6	0	2	1	4

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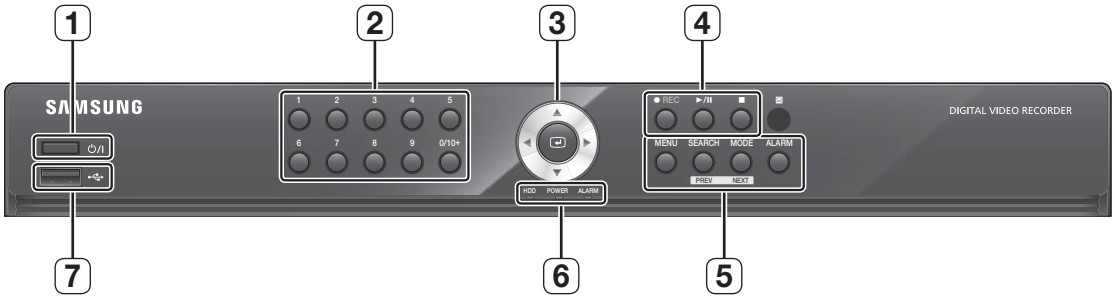
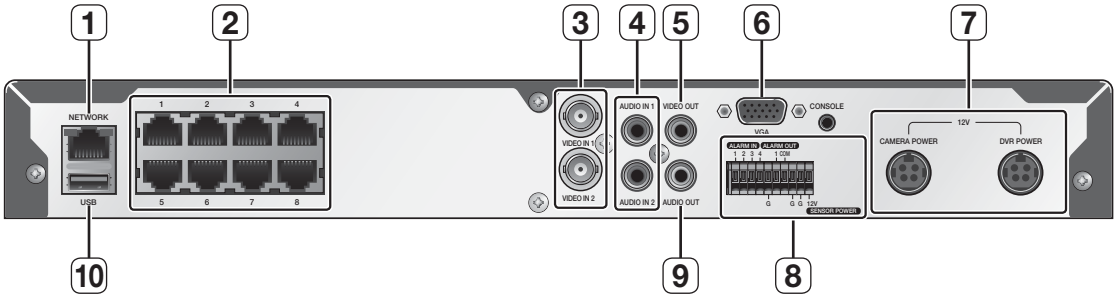
PART NAMES AND FUNCTIONS (FRONT)



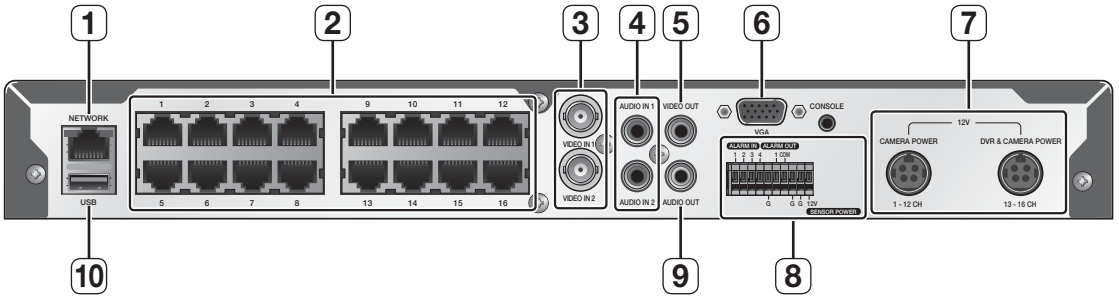
Part Names		Functions
1	Power	Used to turn the DVR ON/OFF.
2	Channel	Used to select channel numbers directly in the Live Mode, or numbers in the numeric input mode. ▪ CHANNEL 1–9 : Press each button between 1 to 9. (8CH : 8) ▪ CHANNEL 10 : Press the [**0/10+**] button. ▪ CHANNEL 11–16 : Press the [**0/10+**] button first, then press any number between 1 to 6 within 1 second.
3	Direction (▲▼◄►) / Select Button	Used to change a value or move the cursor up/down/left/right. Selects a menu item or executes the selected menu.
4	REC	Starts or ends the recording.
	►/II	**Play/Pause** : Used to pause or resume the screen.
	■	**Stop** : Used to stop the playback.
5	MENU	Either goes to the system menu screen or moves to the upper menu from the lower menu.
	SEARCH / PREV	Starts search menu. **PREV** : Used to move to the previous page in setup or search page.
	MODE / NEXT	Each time you press the button in Live mode, the screen mode will be switched in sequence. Each time you press the button in play mode, the screen mode will be switched in sequence. (1 live channel + (N-1) live channel) **NEXT** : Used to move to the next page in setup or search page.
	ALARM	Cancels the ALARM LED and the audible alarm when the alarm is going off, and to remove the icon.
6	LED Indicator	**HDD** : Displays the normal access to HDD. Upon access to HDD, LED is on.
		POWER : Displays the power ON/OFF status.
		ALARM : Lights on when an event occurs.
7	USB Port	Connects the USB devices.

PART NAMES AND FUNCTIONS (REAR)

SDE-4001



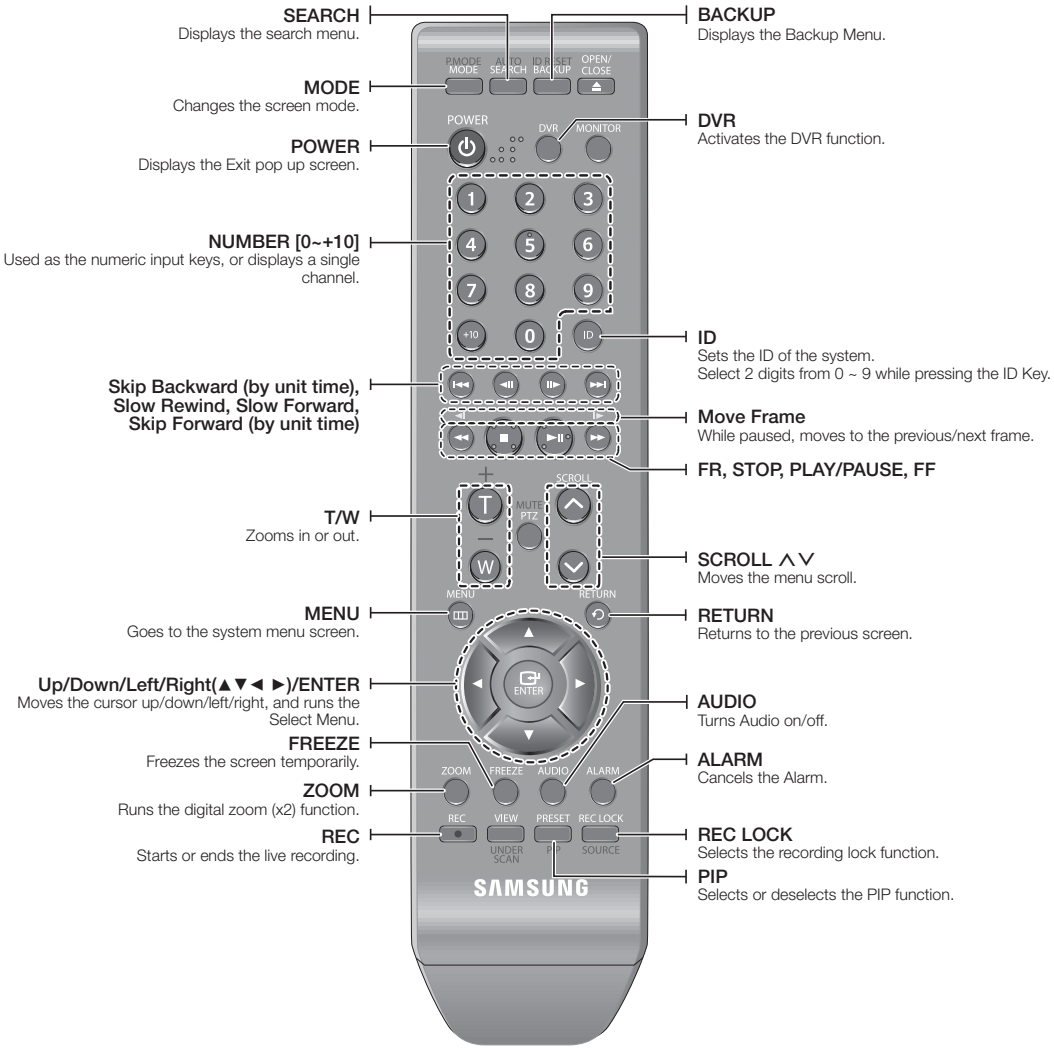
SDE-5001



Part Names		Functions
1	NETWORK	NETWORK connector port.
2	CAMERA IN	Video Signal input ports (UTP type connector).
3	VIDEO IN	Composite Video Signal Input Port (BNC type connector).
4	AUDIO IN	Audio input signal port (RCA jack).
5	VIDEO OUT	Video Signal Output Port (RCA jack).
6	VGA	VGA Video Signal Output Port.
7	POWER	Camera and DVR power input port.
8	ALARM	- ALARM IN 1~4 : Alarm Input port. - ALARM OUT : Alarm Output port. - SENSOR POWER : Sensor Power Output port.
9	AUDIO OUT	Audio Signal Output Port (RCA jack).
10	USB	USB connector port.

- If you connect UTP camera(SEB-1006R) that support Audio to CH3~CH16, Audio output for CH3~CH16 will be available.
- Do not connect UTP camera and BNC camera simultaneously. (CH1, CH2)
- Use only provided UTP camera.

REMOTE CONTROL



Using the numeric buttons

CHANNEL 1–9	Press each button between 1 to 9. (8CH : 8)
CHANNEL 10	Press the [**0/+10**] button.
CHANNEL 11–16	Press the [**0/+10**] button first, then press any number between 1 to 6.

Changing the Remote Control ID

1. Press the ID button of the remote control and check the ID displayed on the DVR screen. The factory default ID of the remote control is 00.
2. Enter 2 digits of your selection in order, while pressing the system [**ID**] button.
3. When ID input is done, press the system [**ID**] button again to check the setting.

▪ If you want to change the remote control ID to 08: Press 0 and 8 in order while the system [**ID**] button is pressed. Remote control's ID and DVR's ID should be matched for proper operation. Refer to "**Remote Devices**". (Page 45)

installation

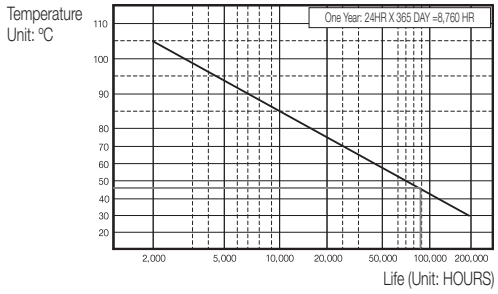
Please take note of the followings before using this product.

- Do not use the product outdoor.
- Do not spill water or liquid in the connection part of the product.
- Do not impose the system to excessive shock or force.
- Do not pull out the power plug forcefully.
- Do not disassemble the product on your own.
- Do not exceed the rated input/output range.
- Use a certified power cord only.
- For the product with an input ground, use a grounded power plug.

CHECKING THE INSTALLATION ENVIRONMENT

Samsung Digital Video Recorder ("DVR" hereinafter) is a state-of-art security device, and contains mass storage hard disk(s) and critical circuits inside.

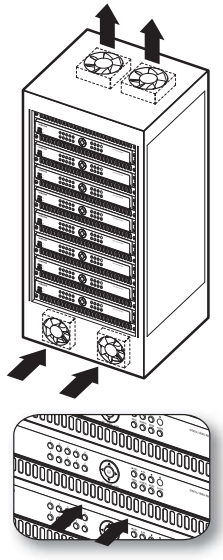
When the temperature rises inside the product, the product may breakdown and the product life be shortened. Please pay attention to the following recommendations before installation.



[Figure 1]

The followings are the recommendations when Samsung DVR is installed on a rack.

1. Please ensure that the rack inside is not sealed.
2. Please ensure the air is circulated through the inlet/outlet as shown in the picture.
3. If the DVR or other devices on a rack is to be stacked as in the picture, provide a suitable space or install a ventilating opening for air circulation.
4. For natural air convection, place the inlet at the bottom of the rack and the outlet on top.
5. It is strongly recommended that a fan motor is installed at the inlet and the outlet for air circulation. (Please fit a filter at the inlet to screen dust or foreign substances.)
6. Please maintain the temperature inside the rack or surrounding areas between 0°C ~ 40°C (32°F ~ 104°F) as shown in the figure 1.



[Figure 2]

Rack Mount Instructions - The following or similar rack-mount instructions are included with the installation instructions :

A) Elevated Operating Ambient - If installed in a closed or multi-unit rack assembly, the operating ambient temperature of the rack environment may be greater than room ambient. Therefore, consideration should be given to installing the equipment in an environment compatible with the maximum ambient temperature specified by the manufacturer.

B) Reduced Air Flow - Installation of the equipment in a rack should be such that the amount of air flow required for safe operation of the equipment is not compromised.

C) Mechanical Loading - Mounting of the equipment in the rack should be such that a hazardous condition is not achieved due to uneven mechanical loading.

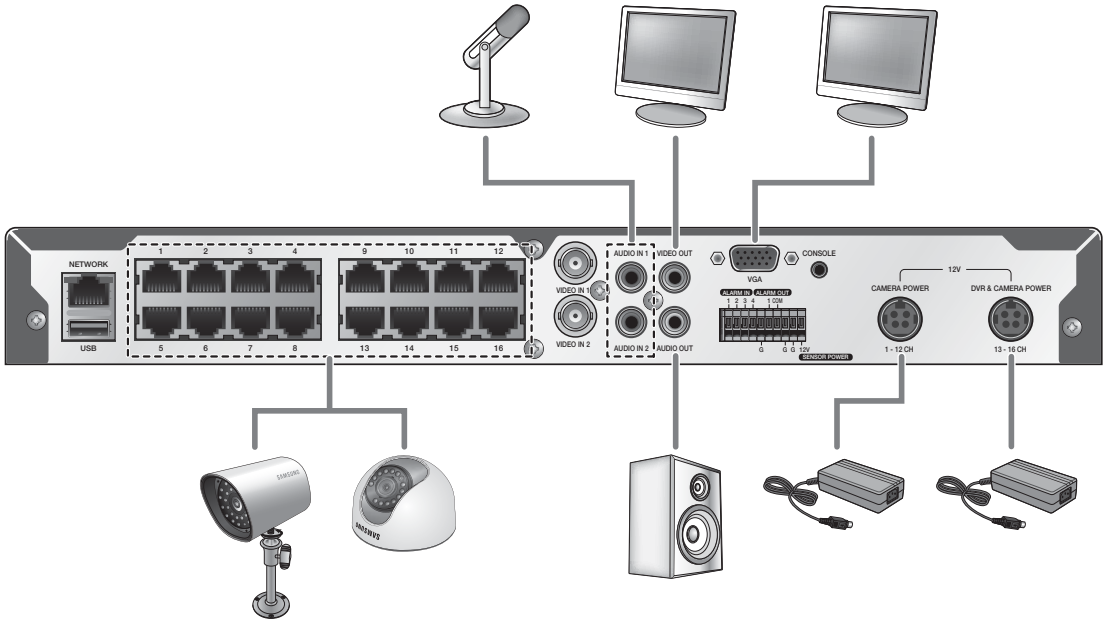
D) Circuit Overloading - Consideration should be given to the connection of the equipment to the supply circuit and the effect that overloading of the circuits might have on overcurrent protection and supply wiring. Appropriate consideration of equipment nameplate ratings should be used when addressing this concern.

E) Reliable Earthing - Reliable earthing of rack-mounted equipment should be maintained. Particular attention should be given to supply connections other than direct connections to the branch circuit (e.g. use of power strips).

connecting with other device

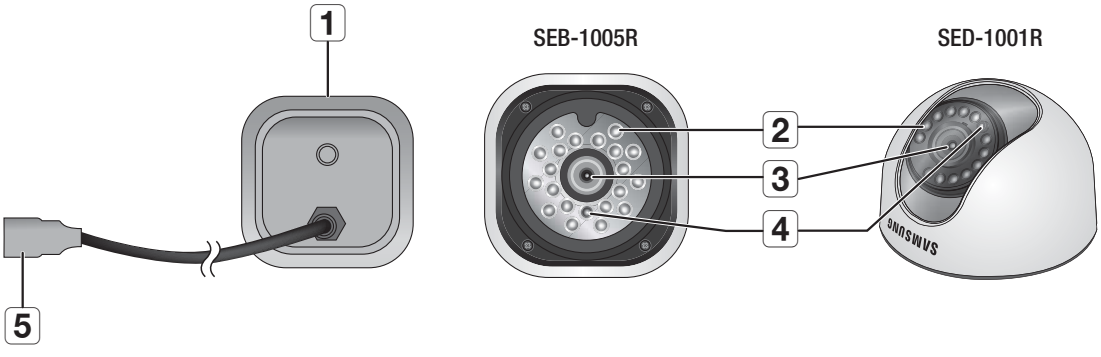
CONNECTING THE VIDEO, AUDIO, AND MONITOR

■ Do not connect UTP camera and BNC camera simultaneously. (CH1, CH2)



CONNECTING THE CAMERA

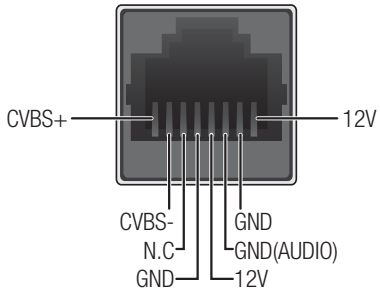
Equipped with the IR LED and the illumination sensor, enables you to monitor at night as well as in daytime.
The camera is suitable for both internal and external use.



connecting with other device

Name		Description
1	Camera Fitting Groove	Groove that is used to fit the camera bracket. There are two grooves; one on the top and one on the bottom.
2	IR LED	These infrared LED's are controlled by the illumination sensor.
3	Lens	Focal length of 3.8mm enables you to cover relatively longer range of monitoring.
4	Illumination Sensor	Detects incoming light to control the IR LED.
5	DVR Connection Cable	Connect the cable directly to the DVR without using a particular power cable. You can use the RJ-45 cable to connect to a remote camera.

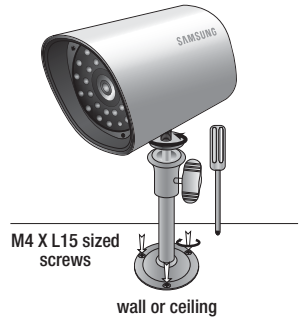
RJ-45 Cable



Installing the camera (SEB-1005R)

The camera can be installed on the wall, ceiling, shelf or a desired position using the provided bracket.

1. Select a position where you want to install the camera.
   - Make sure the selected position can sustain the weight of the camera.
2. Use the screw bolts (M4 X L15) to mount the camera bracket onto the wall or ceiling.
3. Place the camera on the selected position and fit the hole either on the top or the bottom of the camera into the fixing bolt of the bracket, and turn the camera clockwise.



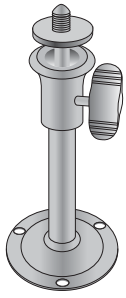
- You should be careful when installing the BOX camera outdoors because the cable connectors may be wet with moisture or pile up with impurities.

Camera Bracket

The camera bracket can be used to install the camera on the wall, ceiling or shelf.

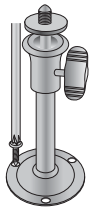
Camera Bracket Specification

Name	Description
Use	Indoor
Installation	Wall or Ceiling
Dimensions	57(W) x 47.2(H) x 100.5(L) mm/ 2.25(W) x 1.86(H) x 3.95(L) inch
Weight	130g (0.29 lbs)
Operating Temperature	-10˚C ~ 50˚C (14˚F ~ 122˚F)
Accessories	SCREW (M4 X L15) : 3 pcs

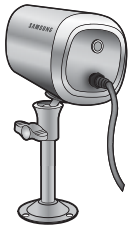


Adjusting the Camera Bracket

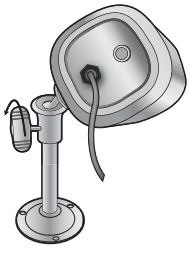
1. Choose an installation site that can sufficiently support the weight of the equipments to be installed.
2. Attach the camera bracket to the wall using the supplied screws (M4 X L15). 4x15 sized screws wall or ceiling.



3. Adjust the camera to target the video location and tighten the camera bracket handle on the camera bracket. Install the camera on to the male screw of the camera bracket by rotating the camera clockwise.



4. Loosen the handle by turning it counter clockwise and then adjust the camera position. Tighten the handle, turning it clockwise to lock the camera in position.
5. Connect the camera cable to the camera.



connecting with other device

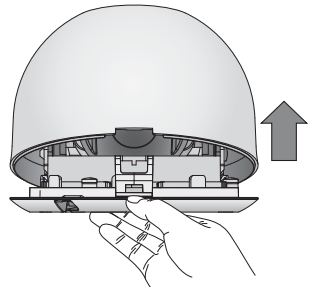
Installing the camera (SED-1001R)

Precautions before installation

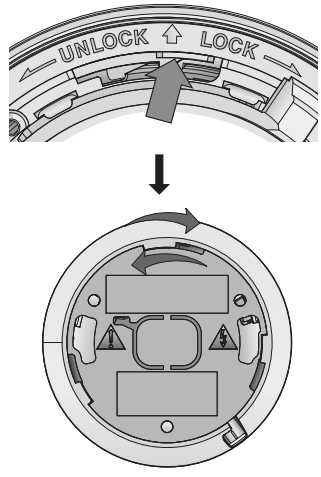
Ensure you read the following instructions before installing the camera:

- Select an installation site (ceiling or wall) that can endure at least 5 times of the camera weight.
- Stuck-in or peeled-off cables can cause damage to the product or a fire.

1. Hold down the bottom lock lever while removing the cover with the other hand.

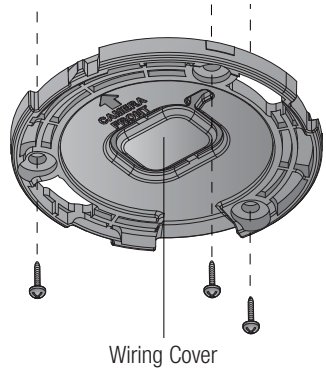


2. Press and hold the lock key outward (in the arrow direction) and turn the bracket counter clockwise to remove it.



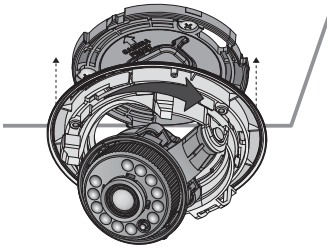
3. Use the provided screws (x3) to fix the bracket to a desired position (ceiling or wall).

- Ensure that the <**CAMERA FRONT**> label on the bracket faces the direction for camera monitoring.



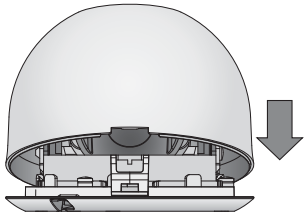
4. Arrange the cables through the bracket to the ceiling or wall.
   If you intend to drill a hole in the installation site for the wiring purpose, remove the wiring cover to reveal a hole. Arrange the cables through the hole.
   If you intend to arrange the cables without drilling a hole, use the empty area opposite to the <**CAMERA FRONT**> label side for the wiring purpose.

5. Mount the main unit onto the bracket.
   Align the marking hole of the main unit with the <**CAMERA FRONT**> label of the bracket, and turn the unit in the <**LOCK**> direction.

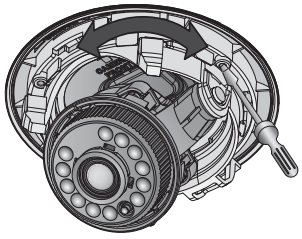


6. Adjust the lens in a desired direction.
   For adjusting the lens direction, refer to "**Adjusting the monitoring direction for the camera**".

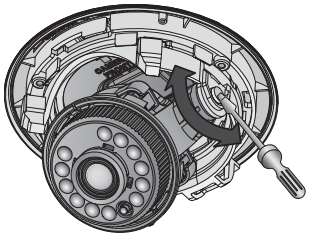
7. Fix the cover to the main unit.
   Align the lock key of the main unit with the latch of the cover. Press down the cover until you hear a click.



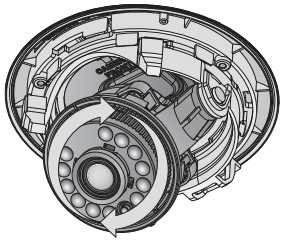
Adjusting the monitoring direction for the camera



Panning



Tilting



Lens rotation

You can adjust the camera direction only when the camera is fixed on the ceiling.
Then, turning the camera to the left or right is referred to as "Panning", while tilting the angle is "Tilting".

- If you want to adjust the panning direction, loosen the bottom screw and turn the camera to a desired direction. Then, tighten the screw back.
  If you couldn't tighten the screw for positioning reasons, select a different screw hole and try again.
- The tilting is available between 0˚ and 60˚. When you finish adjusting the tilt, tighten the tilt adjustable screw if you want to fix the angle.
- If you install the camera vertically on a slanting ceiling or wall, the video from the camera may not be displayed properly. If this is the case, adjust the lens direction to correct the display of the video.

connecting with other device

CONNECTING THE USB

1. By factory default, a USB port is provided for external connection.
2. You can connect a USB HDD, USB memory or mouse to the USB port.
3. If a USB HDD is connected to the system, recognition and settings are available in "**Menu** > **Setting the Device** > **Storage Device**". (Page 43)
4. This product supports hot-plugging, which connects/removes the USB device during the system operation.

> ■ If you use the USB device for Backup purposes, format it with FAT32 on PC if it is not formatted on the DVR.

CONNECTING THE ALARM INPUT/OUTPUT

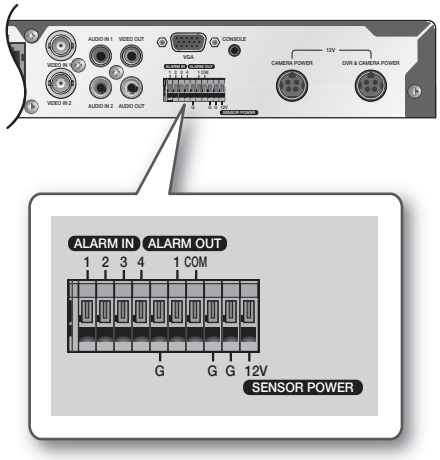
Connecting the alarm Input signal

Connection port for the alarm input signal.
Connect one strand of the sensor signal line (two strands) to the alarm input port and connect the other to the [**G**] port.

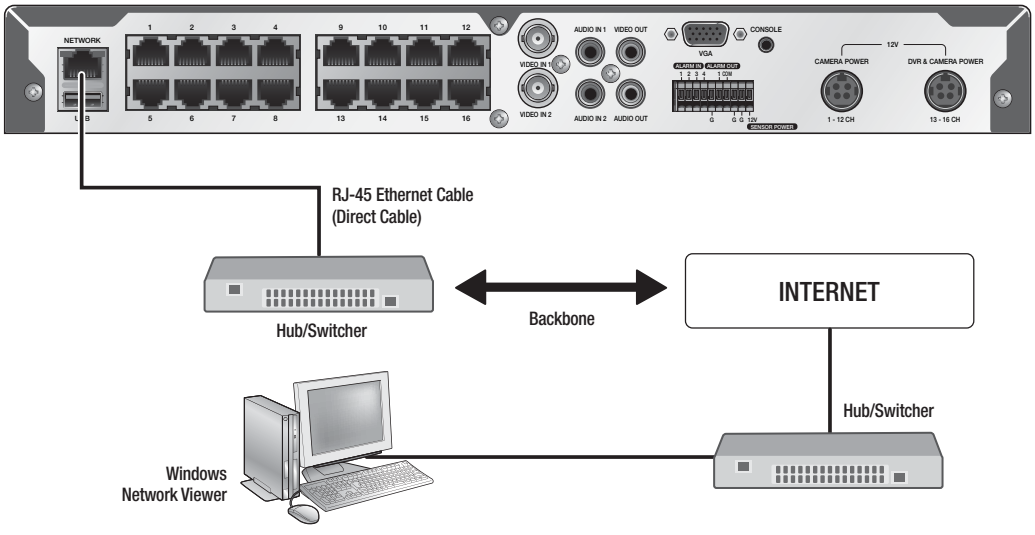
Connecting the alarm output signal

Connection port for the alarm output signal.
Connect one strand of the sensor signal line (two strands) to the alarm output port and connect the other to the [**COM**] port.

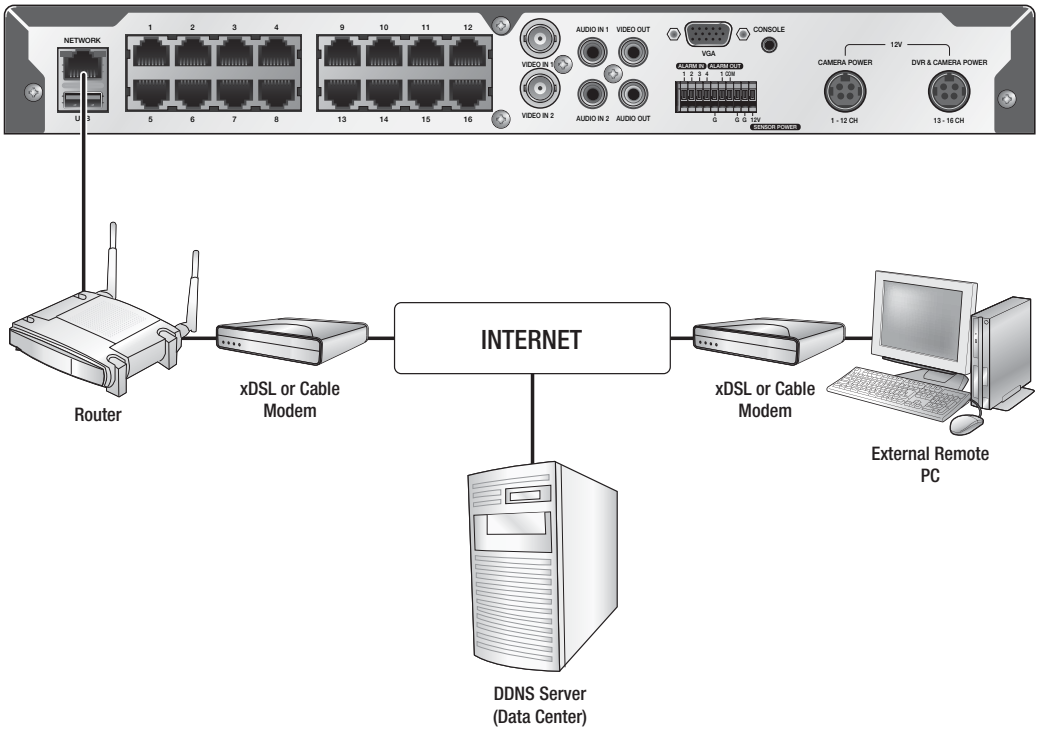
- ALARM IN : 5mA sink
- ALARM OUT : 30VDC 2A, 125VAC 0.5A MAX



Connecting to Internet through Ethernet (10/100BaseT)

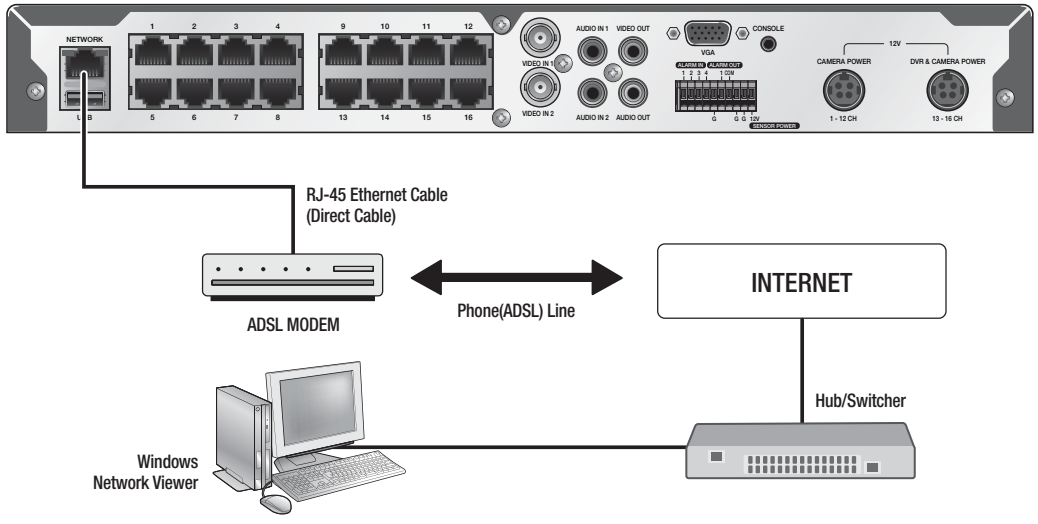


Connecting to the Internet using the router



connecting with other device

Connecting to Internet through ADSL



GETTING STARTED

Starting the system

1. Connect the power cable of the DVR to the wall outlet.
2. Press the Power button on the front panel.

3. You will see the initialization screen.
   The initialization process will last about 1 minute.

4. The live screen appears with a beep.

Shutting Down the System

You can shut down the system only if you have logged in to the DVR.
You require permission to shut down the system if you are not logged in as admin.

1. Press the [**POWER**] button on the remote control or the front panel, or right-click to display the context sensitive menu and select <**Shutdown**>.
2. The "**Shutdown**" confirmation window appears.
3. Use the arrow keys on the remote control or the front panel to move to <**OK**> and press the [**ENTER**] button or click <**OK**>.
   The system will shut down.

- For the permission management, refer to "**Permission Management** > **Setting Permissions**". (Page 37)

Login

To access a DVR or restricted menu, you should have logged in to the DVR.

1. In live mode, right-click any area of the screen.
   You will see the context sensitive menu as in the right figure.

2. Click <**Login**>.
   The login dialog appears.
   You can also see the login dialog to access a desired menu by pressing the [**MENU**] button on the remote control or the front panel.
   - The login dialog will also appear if you press a menu button on the remote control or the front panel of the DVR when the corresponding menu requires logging in.
   - By default, initial ID and password are set to "**admin**", and "**4321**".

- The default password can be exposed to a hacking thread so it is recommended to change the password after installing the product.
  Note that the security and other related issues caused by the unchanged password shall be responsible for the user.

- For the restricted permission, refer to "**Permission Management** > **Setting Permissions**". (Page 37)

Locking All Buttons

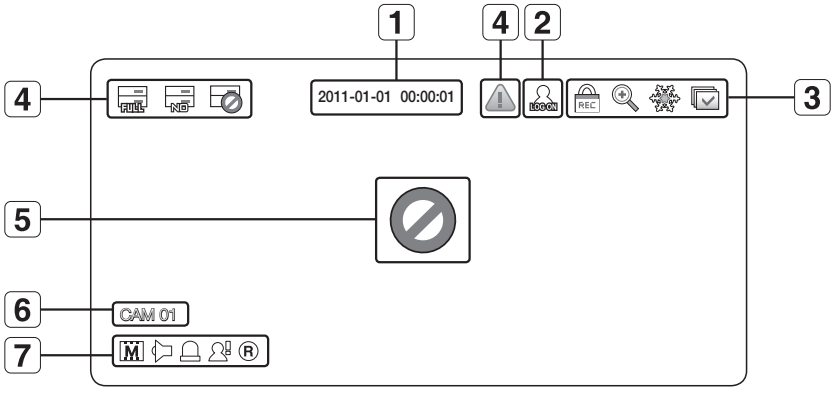
This will restrict access to all buttons available in the DVR.

1. In Live mode, press buttons on the remote control in the order of [**STOP (■)**]→[**FREEZE**]→[**STOP (■)**]→[**FREEZE**]→[**MENU**].
   All buttons will be locked.
2. In the lock condition, press any button to display a dialog where you are prompted to enter the password for unlocking the buttons.
   The button lock will be released if you enter the admin password.

LIVE SCREEN CONFIGURATION

Icons on the Live Screen

You can check the status or operation of the DVR with the icons on the live screen.



Name			Description
1	Current Date, Time		Displays the current time and date.
2	Login Information		When you are logged in, the "**LOG ON**" icon will be displayed.
3	Screen Mode		Displayed if the zoom function is activated.
			Displayed if you press the Freeze button.
			Displayed in Auto Sequence mode where all channels are switched at the specific time interval.
			Displayed if the recording is in process. To cancel the recording, enter the password.
4	System Operation		Displayed if the HDD is full and the DVR has an insufficient space to record.
			Displayed if no HDD is installed or the existing HDD should be replaced.
			Displayed if the HDD needs a technical examination.
			Displayed if a new firmware is found from the network.
5	Video Input Status		Displayed if no input is entered in the condition that the camera is set to <**ON**>.
			Nothing will be displayed on the screen if the camera is set to <**OFF**>.
6	Camera Name/ Channel		Displays the camera name and the changed channel, if any.
7	Camera Operation	L / M / S	Displays the resolution of the recording screen. (Page 49)
			Displays AUDIO ON/MUTE. Not displayed in video mode if deactivated.
			If the sensor is set to <**ON**>, the input signal will be displayed on the screen of the connected channel.
			Displayed if a motion detected in the condition that the motion detection is set to <**ON**>.
		R / E / S	Displays the current record mode from Record/Event/Schedule.

Error Information

- If the internal HDD is not connected, the “NO HDD”( ) message will appear; if there occurs a problem, you will see the “HDD FAIL”( ) message in the top left corner. In this case, make sure you contact the service center for assistance as this may cause a failure of recording, playback or backup.
- As a fan error can shorten the product life, make sure you contact the service center for assistance.

▪ If you see No HDD, HDD FAIL icons on the screen, contact the service center for more details.

Live Screen Menu

In addition to the buttons on the front panel or the remote control, you can access a desired menu by right-clicking the mouse any area in live mode.
The context sensitive menu that appears by right-clicking the screen may differ, depending on the login/logout, screen split mode and DVD operation mode.

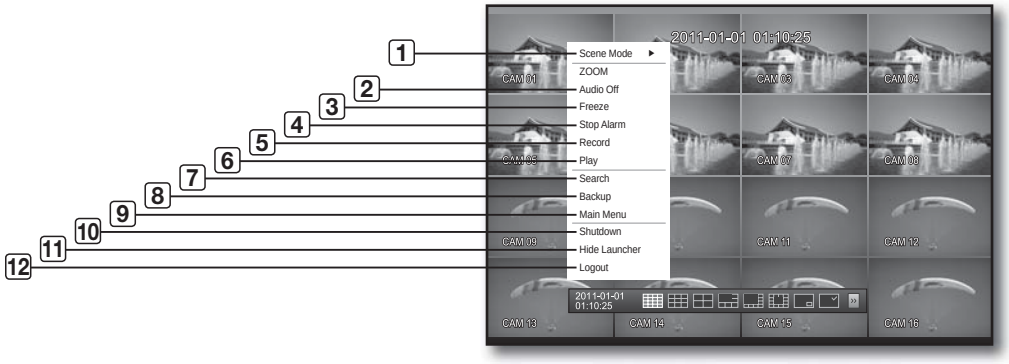
▪ Menu items of Search, Record, Backup and Shutdown can be deactivated, depending on the user permission.

< Split Mode Menu >

< Single Mode Menu >

Split Mode Menu

The context sensitive menu in split mode differs, depending on the login/logout status.



Menu		Description
1	Scene Mode	Refer to "**Live Mode**". (Page 27)
2	Audio On/Off	Refer to "**Audio ON/OFF**". (Page 30)
3	Freeze	Refer to "**Freeze**". (Page 30)
4	Stop Alarm	Stops the alarm output and the event monitoring. Refer to "**Event Monitoring**". (Page 31)
5	Record/Stop	Starts/stops the standard recording.
6	Play	Plays the search result (data). Refer to "**Search & Play** > **Play**". (Page 65)
7	Search	Refer to "**Search & Play** > **Search**". (Page 62)
8	Backup	Refer to "**Using the DVR** > **Setting the Backup**". (Page 54)
9	Main Menu	Accesses the main menu. Refer to the Using the DVR section. (Page 32)
10	Shutdown	Turns down the DVR.
11	Show/Hide Launcher	Shows or hides the launcher. Refer to "**View the Launcher Menu**". (Page 26)
12	Login/Logout	You can log in or out.

Single Mode Menu

The single mode menu is available only in Single Mode.
The context sensitive menu for the One Channel mode, in Split mode is different from that of the Single mode.

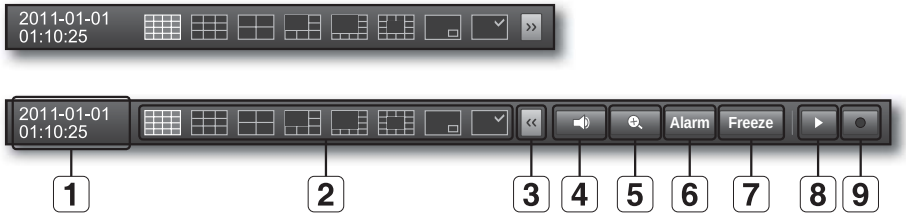
Menu		Description
1	Full Screen	Select and click a desired channel in Split mode to switch to the full screen of the selected channel.
2	ZOOM	Enlarges the selected image. (Page 30)

View the Launcher Menu

The Launcher menu appears on the bottom of the live screen.

1. In Live mode, right-click to display the context menu and select <**Show Launcher**>.
2. Move the cursor to the bottom and click a desired item in the Launcher menu.

- If no input is entered for 10 seconds, the menu will disappear.
- The Launcher menu can be accessed only by using the mouse.
- SDE-4001 do not support the 16-split screen mode.



Menu		Description
1	**Date/Time**	Displays the current time and date. The indication of AM/PM is displayed if you set 12 hours for the time format in "**System** > **Date/Time/Language** > **Time**". (Page 32)
2	**Screen Mode**	Press this button to switch the screen mode in sequence. The current mode is highlighted in white.
3	**Menu Expansion Button**	Click to display the hidden menu to the right.
4	**Audio**	Turns ON/OFF the sound of the selected channel.
5	**Zoom**	Enlarges the selected area. This is available only in Single Live mode.
6	**Alarm**	Stops the alarm if it's activated.
7	**Freeze**	Freezes the Live screen temporarily.
8	**Play**	Enters Play mode if a file to play exist, and if not, enters Search mode.
9	**Record**	Start/End recording the Live screen.

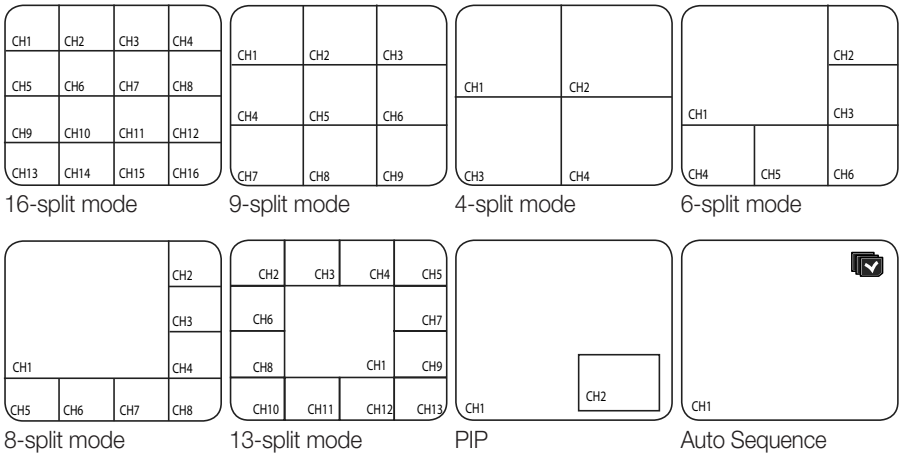
LIVE MODE

SDE-5001 display Live images from 16 channels in a total of 8 layout of split screens.

Switching the screen mode

To switch the split mode, select a screen mode in the launcher menu, or right-click to select a screen mode in the context menu.
Press the [**MODE**] button on the front panel or the remote control to switch the mode in the sequence of the launcher menu items.

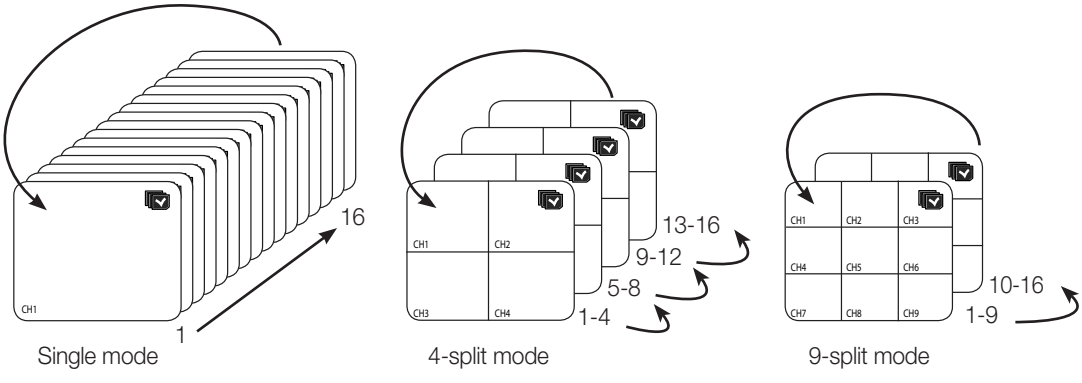
- SDE-4001 do not support the 16-split screen mode.


CH1 CH2 CH3 CH4 CH5 CH6 CH7 CH8 CH9 CH10 CH11 CH12 CH13 CH14 CH15 CH16
16-split mode
CH1 CH2 CH3 CH4 CH5 CH6 CH7 CH8 CH9
9-split mode
CH1 CH2 CH3 CH4
4-split mode
CH1 CH2 CH3 CH4 CH5 CH6
6-split mode
CH1 CH2 CH3 CH4 CH5 CH6 CH7 CH8
8-split mode
CH1 CH2 CH3 CH4 CH5 CH6 CH7 CH8 CH9 CH10 CH11 CH12 CH13
13-split mode
CH1 CH2
PIP
CH1
Auto Sequence

Switching the split mode

SDE-5001 display 16 Live images in the sequence of Single, 4-split and 9-split modes.

Auto Sequence

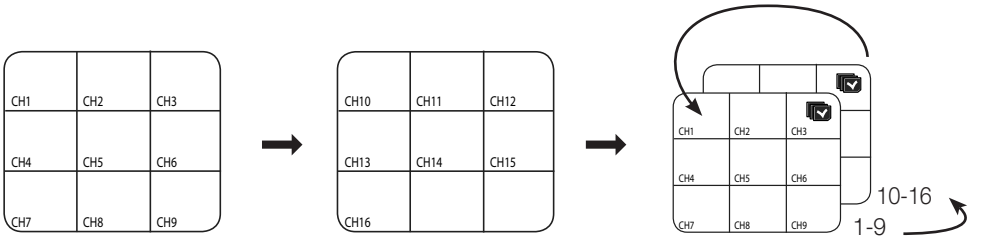


- In Single mode, If you have set <**SEQ-Dwell Time**> in "**Setting the Device** > **Camera**", Auto Sequence will be conducted at the set interval. (Page 42)
- In a split mode, If you have set <**Multi CH SEQ Time**> in "**Setting the Device** > **Monitor**", Auto Sequence will be conducted at the set interval. (Page 46)

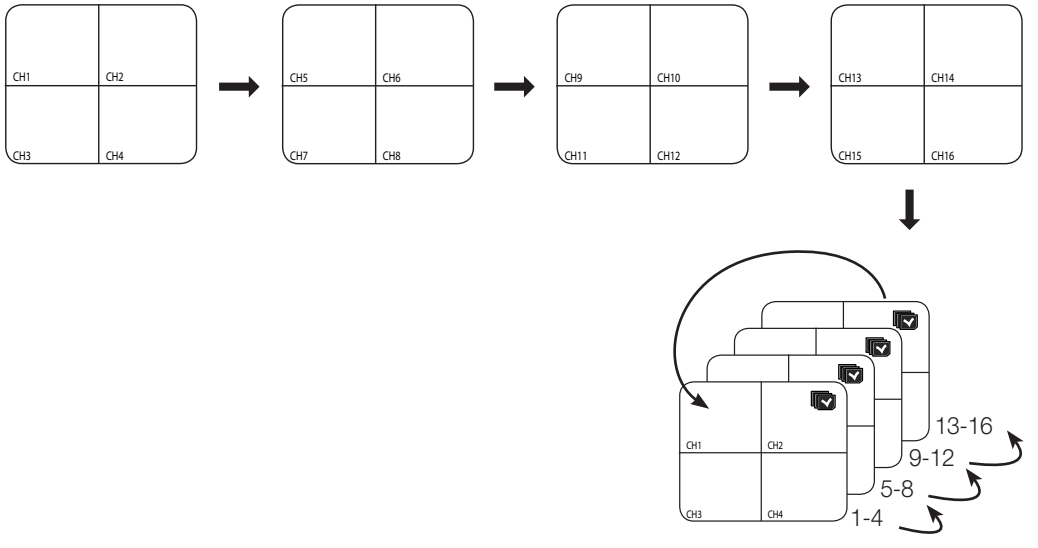
Manual Switching

Press the left/right button on the front panel or the remote control, or click the arrow <◄/►> key to move to the next split mode.

- If pressing the right [►] button in 9-split mode :
  9-split (CH 1~9) mode → 9-split (CH 10~16) mode → Auto Sequence



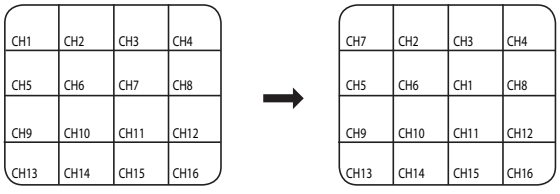
- If pressing the right [►] button in 4-split mode :
  Channel (CH 1~4) → Channel (CH 5~8) → Channel (CH 9~12) → Channel (CH 13~16) → Auto Sequence



Channel Setting

You can display the channel in a desired area of a split screen.

1. Place the cursor over the camera name of each channel to display the <▼> key to the right on the screen.
2. Click a camera name to display a channel list where you can select a different channel.
3. Select a desired channel and click it.
   The current channel will be switched to the selected one.
   Use the cursor to select a channel to move, and drag and drop it to a desired channel; this can also change the channel position.
   - Ex : if switching CH 1 to CH 7


CH1 CH2 CH3 CH4
CH5 CH6 CH7 CH8
CH9 CH10 CH11 CH12
CH13 CH14 CH15 CH16
CH7 CH2 CH3 CH4
CH5 CH6 CH1 CH8
CH9 CH10 CH11 CH12
CH13 CH14 CH15 CH16

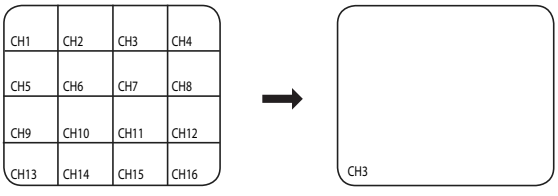
Switching to Single Mode

When in split mode, select and double-click a desired channel to switch to its Single mode.
Press the number corresponding to a desired channel on the front panel or the remote control to switch to its Single mode.

- CHANNEL 1–9 : Press each button between 1 to 9. (8CH : 8)
- CHANNEL 10 : Press the [**0/+10**] button.
- CHANNEL 11–16 : Press the [**0/+10**] button first, then press any number between 1 to 6 within 1 second.

Refer to "**Remote Control** > **Using the numeric buttons**". (Page 11)

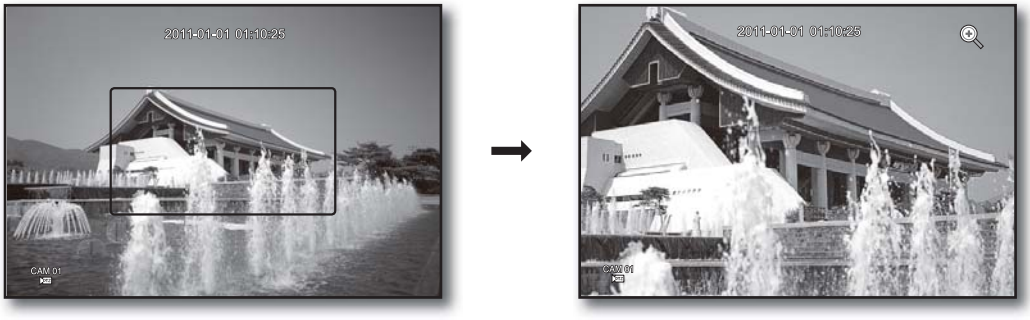
- Ex : If double-clicking CH 3 or pressing the number "3" on the remote control or the front panel.



ZOOM

This is available only in Single Live mode. In Single mode, select a desired area and use the Zoom function to enlarge it twice.

1. Select <**ZOOM**> in the right-click menu.
   Press the [**ZOOM**] button on the remote control, or simply click < > in the launcher menu. The zoom box appears.
2. Use the direction keys, or drag and drop to specify an area to enlarge.
3. Press the [**ENTER**] button, or double-click the selected area to enlarge it twice.
   - In the enlarged image, use the direction buttons (▲▼◄ ►) on the remote control or the front panel to move the enlarged area.
4. Press the [**ZOOM**] button on the remote control, or simply click < > in the launcher menu to release the zoom.



AUDIO ON/OFF

You can turn the sound on/off corresponding to the channel in Live mode.

AUDIO ON/OFF in Single mode

Click the audio icon ( ) on the screen, or press the [**AUDIO**] button on the remote control to turn it on/off.

- Only the channel where <**AUDIO**> is set to <**ON**> in "**Device** > **Camera**" displays the audio icon ( ) in Live mode that you can use to turn the sound on/off.

FREEZE

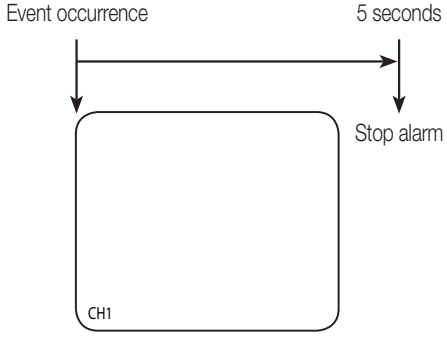
This is available only in Live mode, this pauses playing the Live image temporarily.

1. Press the [**FREEZE**] button on the remote control, or click < Freeze > in the launcher menu.
   The playback of the image is stopped temporarily.
2. Press the [**FREEZE**] button again, or click < Freeze >.
   This will release the freeze.

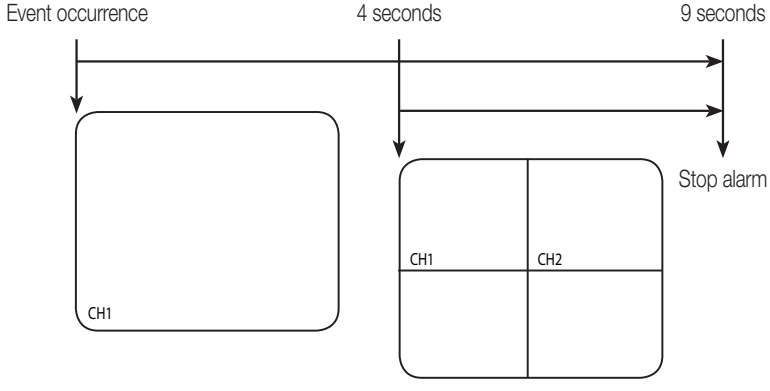
EVENT MONITORING

This will display the channel in sync with a specific event (Sensor/Motion/Video Loss) if it occurs.
In "**Monitor** > **Event Display**", set the event monitoring to ON/OFF and specify the event display time. (Page 46)

- If multiple events occur simultaneously, the screen will switch to a split mode.
  - 2~4 events : 4-split mode
  - 5~9 events : 9-split mode
  - 10~16 events : 16-split mode
- If the second event occurs within the set time of <**Event Display**>, the first event will last until the second one is terminated. (Page 46)
  - Ex : If you set <**Event Display**> to 5 seconds, and only one event occurs in CH 1.



  - Ex : If you set <**Event Display**> to 5 seconds, and the second event occurs in CH 2 within the set time after the first event occurred in CH 1.



- Press the [**ALARM**] button to reset the alarm settings and to release the event mode.
- If an alarm activates in the condition you have set the event record, and pre/post alarm times, the event record will be performed.

using the DVR

You can setup the system properties, devices, and options for recording, event, backup and network.

SYSTEM SETUP

You can setup Date/Time/Language, Permission, System Properties and Log.

Date/Time/Language

You can check and setup the current Date/Time and time related properties, as well as the language used for the interface on the screen.

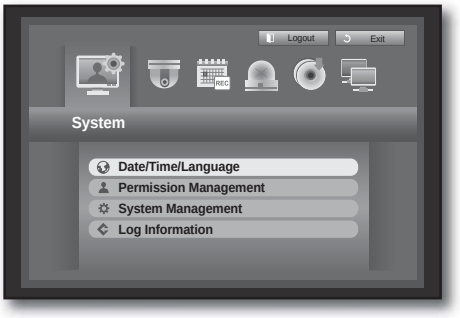
Setting the Date/Time/Language

Set the Date/Time/Language

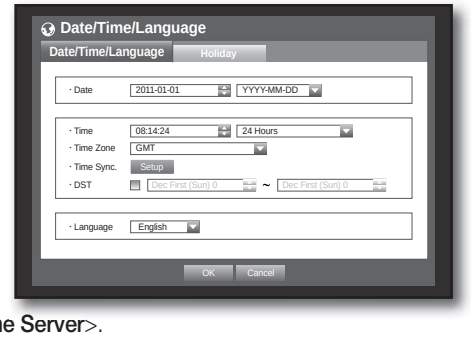
Using the mouse may help make setup easier.

1. Press the [**MENU**] button on the remote control or on the front panel.
   - If not logged in, it prompts with login window. Refer to "**Login**". (Page 22)

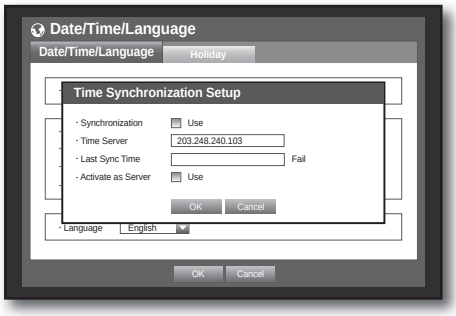
2. Use the left/right buttons (◄ ►) to select the <**System**>. System property setup menu is selected.
3. Use the up/down buttons (▲▼) to select <**Date/Time/Language**> and press the [**ENTER**] button.
4. Select <**Date/Time/Language**>. A dialog to setup Date, Time and Language.
5. Use direction buttons (▲▼◄ ►) to select an item to set and make your changes.



- Date : Sets the date that will appear on the screen. You can select the date format.
- Time : Sets the time and its format that will appear on the screen. Select either one from <**24 Hours, 12 Hours (AM/PM)**>.
- Time Zone : Sets the time zone of your area based on the Greenwich Mean Time (GMT).
  - GMT (Greenwich Mean Time) is standard World Time and the basis of world time zone.
- Time Sync. : You can set the DVR's current time synchronized to a selected <**Time Server**> regularly if you select to use <**Time Server**>. In this case, <**Date/Time/Language**> setup does not allow time adjustment.



- Time Server : Enter an IP or URL address of the time server.
- Last Sync Time : Displays the most recent synchronization time from the selected time server.
- Activate as Server : Set to <**Use**> to allow the DVR to act as a Time Server for other DVRs.



- DST : Set up Daylight Saving Time with its period to make the time earlier than the GMT of its time zone by 1 hour during the set period.
- Language : Select your language. Sets the language for the interface.
  English, French, German, Spanish, Italian, Chinese, Russian, Korean, Polish, Japanese, Dutch, Portuguese, Turkish, Czech, Danish, Swedish, Thai, Romanian, Serbian, Croatian, Hungarian and Greek are available.

6. When the Date/Time/Language setup is done, press <**OK**>.

■ You can also use numeric buttons on the remote control or front panel to enter values for Date, Time and other numeric fields.

Setting Holiday

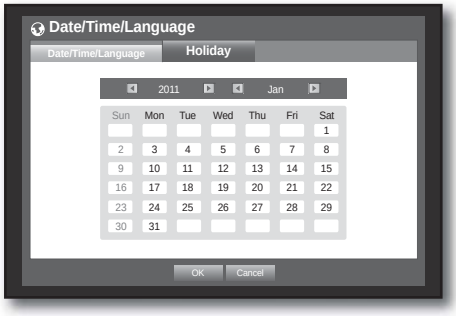
You can set specific dates to Holidays according to your preferences.
Holidays are applied to <**Recording Schedule**> and <**Alarm Schedule**> too.

Using the mouse may help make setup easier.

1. Use the up/down buttons (▲▼) in <**Date/Time/Language**> window to select <**Date/Time/Language**>, and press the [**ENTER**] button.

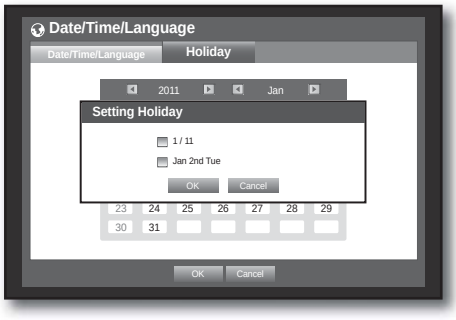
2. Select <**Holiday**>.
A calendar for Holiday setup appears.

3. Use the left/right <◄ ►> buttons to select year or month, and press the [**ENTER**] button.



4. Use direction buttons (▲▼◄ ►) to select a desired date, and press the [**ENTER**] button.
You will see the "**Setting Holiday**" screen.
■ Ex : Select January 11th and check on <**1/11**> only to make every January 11th a holiday. Check both on <**1/11**> and <**Jan 2nd Tue**> to make every January 11th and 2nd Tuesday of January holidays.

5. When the Holiday setup is done, press <**OK**>.



Using the Calendar

Using the mouse may help make setup easier.

① Select year and month.
Select the left/right <◄ ►> key on the left/right side of year/month and press [**ENTER**] button to adjust by 1 year/month.

② Use direction buttons to select a date and press [**ENTER**] button.
■ A date with recorded data to be searched will appear in yellow in the System Log, Event Log, Time Search and Event Search.

Permission Management

You can set permissions of each user over the DVR's specific function and settings.

Setting the Administrator

You can set and change Administrator's ID and password.
The administrator can use and set all menu items and functions.

Using the mouse may help make setup easier.

1. Use the up/down buttons (▲▼) in <**System**> window to move to <**Permission Management**>, and press [**ENTER**] button.
2. Select <**Admin**>.
   A dialog for Admin ID and Password input appears.
3. Use direction buttons (▲▼◄ ►) to move to a desired item, and set the ID and password.

- By default, initial ID and password are set to "**admin**", and "**4321**".
- The default password can be exposed to a hacking thread so it is recommended to change the password after installing the product.
  Note that the security and other related issues caused by the unchanged password shall be responsible for the user.

4. When the administrator setup is done, press <**OK**>.

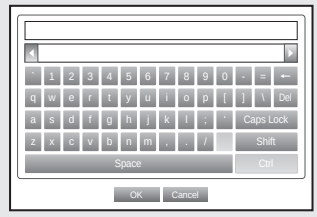
Using Virtual Keyboard

① For alphanumeric inputs, the virtual keyboard window appears.

② Use direction buttons (▲▼◄ ►) to move to a desired character, and press the [**ENTER**] button.

③ In the upper text input box of the virtual keyboard, there displays a list of candidate words containing the selected character.

④ Select a word from the list, or use the keyboard to enter the whole word.



- If there are many of candidate words, use < , > buttons to move between them forward and backward.
- You can use mouse wheel and jog shuttle button too.

⑤ Select <**OK**>.
Entered word is applied.

- For upper case letters, use <**Caps Lock**> button.
- For special characters, use <**Shift**> button.
- Using the virtual keyboard is the same to a normal keyboard use in your region.
- You can enter only lower-case alphabets and numeric values for the user ID.
- For the password, use alphabets and special characters excluding < \ > and <**"**>.
- You can use number buttons on the remote control or front panel.

Setting the Group

You can create user groups and setup permissions for those user groups.
You can register a user for each group in <**User**>.

Using the mouse may help make setup easier.

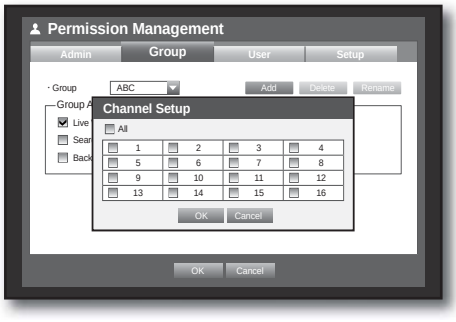
1. Use the up/down buttons (▲▼) in <**System**> window to move to <**Permission Management**>, and press [**ENTER**] button.
2. Select <**Group**>.
   A window for <**Add**>, <**Delete**>, <**Rename**>, and <**Group Authority**> setup appears.
3. Use direction buttons (▲▼◄ ►) to move to a desired item, and set the value.

- Add, Delete, Rename : You can add, delete, rename a group or modify the permissions given to the group.
  The virtual keyboard appears when <**Add**> or <**Rename**> was selected.
  You can add up to 10 groups.
  - Add : When you first run the DVR with the admin account, only the admin account exists. Add has already been deactivated. Select to display the virtual keyboard. Enter a group name. You can add up to 10 groups.
  - Delete : Deletes a user group that is already registered. Selecting Delete will delete all user accounts belonging to that group.
  - Rename : Renames a group that is already registered. Select <**Rename**> to display the virtual keyboard.
    - For entering a group name, refer to "**Using Virtual Keyboard**". (Page 34)
- Group Authority : Sets permissions to access menu items of each group.
  Users of a group can access checked functions.

4. When the group setup is done, press <**OK**>.

To set the group authority

You can set the permissions of the group users to access the menu according to the channel.



1. Select a menu to which the group permission is assigned.
   The menu where the group permission is assigned will be displayed in the Live menu when a group user logs in.

- Live View : You can set the permission to access the Live screen according to the channel.
  - SDE-4001 shows a list of 8 channels in Channel Setup window.
- Search : You can set the permission to access the Search menu according to the channel.
- Backup : You can set the permission to access the Backup menu according to the channel.

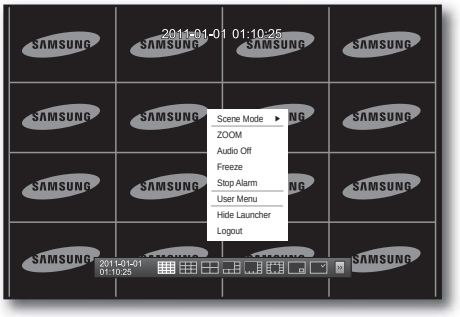
2. Select <**OK**>.
   Select and assign a group user so that the user can access the specified menu.

To restrict the user permissions

If the admin restricts all permissions of an added group, the users belonging to that group can access only the default minimum menus and can change the user's own password only.

1. Start the DVR.
   If all permissions are restricted, only the Login dialog should appear.
2. Log in with a registered user ID.

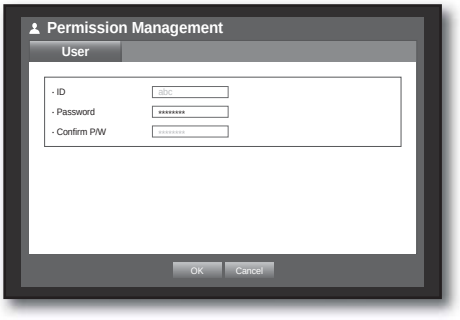
3. Right-click any area on the screen.
   If all permissions are restricted, only the accessible context menus should appear.



To change the user password

If you log in with a user account that is restricted to access the menu, you can change your own password only.

1. Log in with your account.
2. Select <**User Menu**>.
   The Permission Management setup screen appears.
3. Select <**Permission Management**>.
   The Password setup dialog appears.
4. Enter a new password.
5. Select <**OK**>.
   You change to the password will be applied.

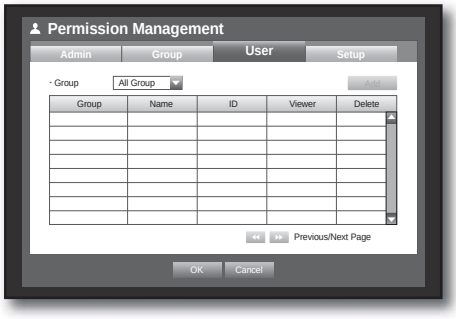


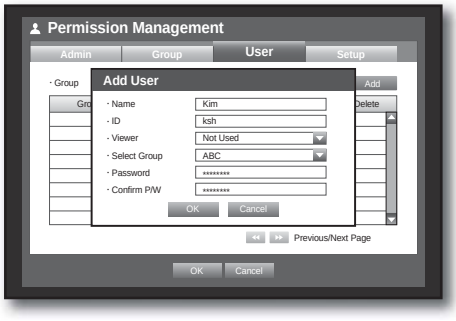
Setting the User

Users can be added only if a group was created in <**Group**> menu.

Using the mouse may help make setup easier.

1. Use the up/down buttons (▲▼) in <**System**> window to move to <**Permission Management**>, and press [**ENTER**] button.
2. Select <**User**>.
   A window for Add User appears.
3. Use direction buttons (▲▼◄ ►) to select <**Add**> from the window.
   A window for "**Add User**" appears.
   You can configure the Network Viewer settings including name, ID, viewer, Select Group and password.
   Result of the user setup appears in the <**User**> window.
   To change the user property, use "**Edit User**".
   The "**Edit User**" window appears when you select a desired item to be changed in the <**User**> window.





- Viewer : If you select <**Use**>, you will be given access to the Web Viewer and Network Viewer.
  - Refer to "**Connecting Web Viewer**". (Page 68)
  - For more information about use of Network Viewer, refer to the Network Viewer's user guide. (Page 6)

4. When the user setup is done, press <**OK**>.

Setting Permissions

You can set restricted access for all general users.
Items with restrictions will require logging in for use.

Using the mouse may help make setup easier.

1. Use the up/down buttons (▲▼) in <**System**> window to move to <**Permission Management**>, and press [**ENTER**] button.
2. Select <**Setup**>.
   The Restricted Access, Restriction on Network Access, Auto Log out, Manual Input of ID setup screen appear.
3. Use direction buttons (▲▼◄ ►) to move to a desired item, and set the value.

- Restricted Access : All menu items allowed for a user can be set with restricted access.
  - Checked (☑) : Restricted
  - Not checked (☐) : Accessible
  - If it is not checked (☐) in <**Restricted Access**>, any user can access the item no matter what the <**Group Authority**> setting.
  - If it is checked (☑) in <**Restricted Access**>, a user can access the item only if the user has permission in <**Group Authority**> setting.
- Restriction on Network Access : Restricts remote access from a <**Restricted Access**> network.
  - All Network : Restricts all access instances via Network Viewer and Web Viewer.
  - Web Viewer : Restricts access via the Web Viewer.
- Auto Log out : A user will be automatically logged out if there is no operation on DVR for over set period of time.

- Manual Input of ID : Prompts you to enter the user ID manually for the login process.
  - Checked (☑) : Encloses the registered user IDs with the [∗] symbols.
    Use the virtual keyboard to enter the user ID.

4. When the permission setup is done, press <**OK**>.

System Management

You can check the system version, update to a newer version, as well as data backup and initialization.

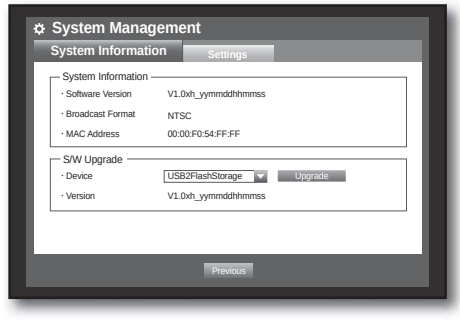
Checking the System Information

You can check the current system version, broadcasting system, MAC address. You can update the system.
Using the mouse may help make setup easier.

1. Use the up/down buttons (▲▼) in <**System**> window to move to <**System Management**>, and press [**ENTER**] button.

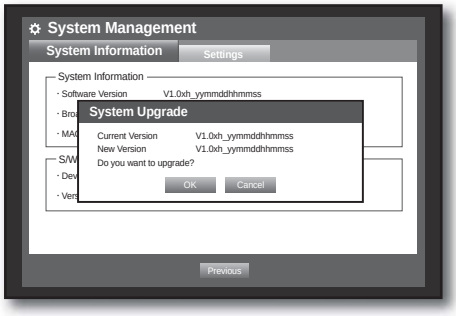
2. Check the Version, Broadcast Format, and MAC Address.

- System Information : Shows the current system's information.
  The values can not be changed by a user.
- S/W Upgrade : Updates the DVR's software up to date.



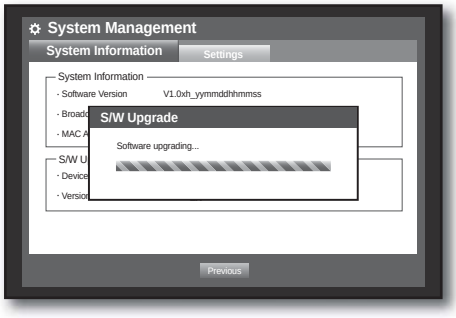
• **Updating the Software**

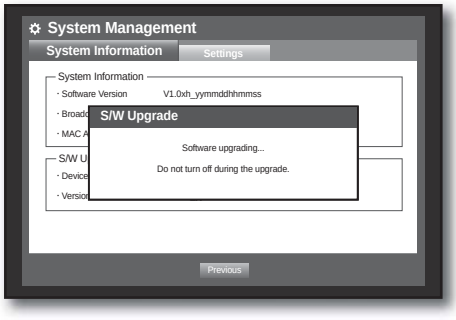
1. Connect a device storing the software to be updated.
   (It may take about 10 seconds to recognize the device.)
   - Upgradeable devices include USB memory and network device.
   - To update the network, the current DVR should have been connected to the network.
     Upgrade via the proxy server may not be enabled due to the restricted access.



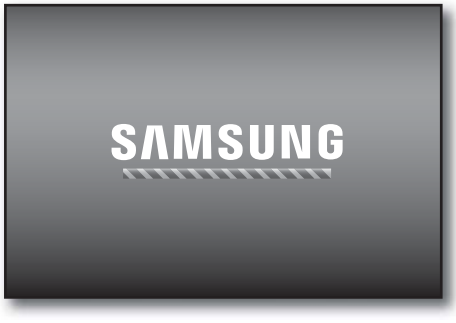
2. Select <**System Management**> from <**System**> window.
3. Select <**System Information**>.
4. When the recognized device appears, select <**Upgrade**>.
   - The <**Upgrade**> button will be activated only if the current <**Software Version**> of the <**System Information**> is same to or older than that of <**S/W Upgrade**>.
5. Press <**OK**> in the "**System Upgrade**" window.
   - While updating, it shows the progress.

• Updating progresses with 3 steps as shown in the figure.





6. When the updating is done, it automatically restarts.
   Do not turn the power off until it finishes restarting.



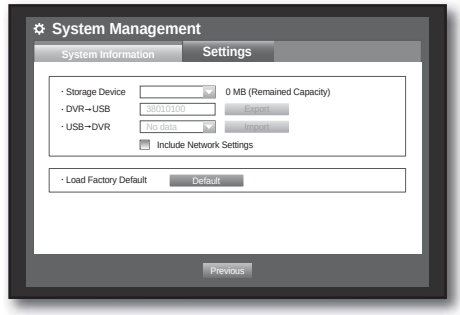
- If "**Upgrade Failed**" appears, retry from the step 4.
  When you experience continued failure, consult the service center for assistance.

Settings

You can copy and import the DVR settings by using a storage media.

Using the mouse may help make setup easier.

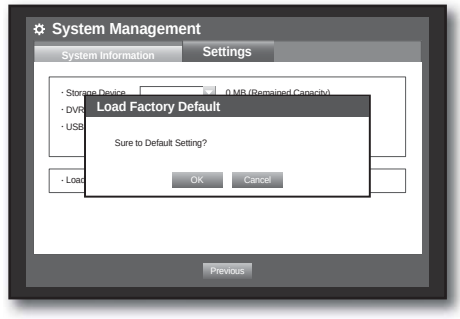
1. Use the up/down buttons (▲▼) in <**System**> window to move to <**System Management**>, and press [**ENTER**] button.
2. Select <**Settings**>.
   A window of storage device and load factory default appears.
3. Use direction buttons (▲▼◄ ►) to move to a desired item, and export or import settings data to a storage device.



- Storage Device : Shows the connected storage device.
- DVR→USB : Exports DVR settings to the connected storage device.
- USB→DVR : Imports DVR settings from the storage device and applies to the DVR.
  - If <**Include Network Settings**> is checked, the network settings will be imported too.

- Load Factory Default : If <**Default**> is selected, a confirmation dialog for "**Load Factory Default**" prompts. Press <**OK**> to initialize the system to the factory default.

4. To move to the previous menu, press <**Previous**>.



Log Information

You can browse logs on the system and events.

System Log

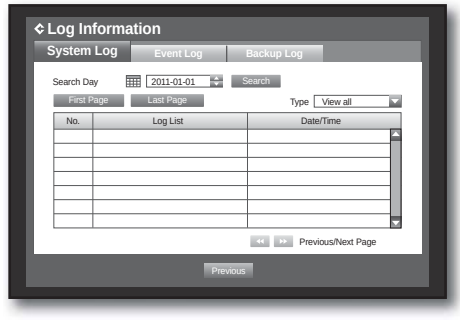
System Log shows log and timestamp on every system start up, system shutdown, and changes on system settings.

Using the mouse may help make setup easier.

1. Use the up/down buttons (▲▼) in <**System**> window to move to <**Log Information**>, and press [**ENTER**] button.
2. Select <**System Log**>.
   - Refer to "**Using the Calendar**". (Page 33)
     Click on the calendar <▦> to display the calendar window.

- Type : When there are too many logs, you can display logs of the desired format by selecting the type.

3. Use direction buttons (▲▼◄ ►) to move to a desired item, and press <**Search**>.

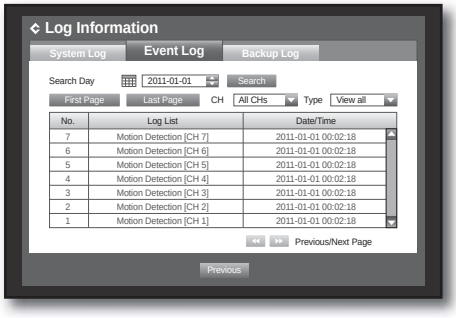


Event Log

Event log shows recorded events on alarms, motion detections and video loss.
It also shows the log and its timestamp.

Using the mouse may help make setup easier.

1. Use the up/down buttons (▲▼) in <**System**> window to move to <**Log Information**>, and press [**ENTER**] button.
2. Select <**Event Log**>.
3. Use direction buttons (▲▼◄ ►) to move to the desired item.
4. Set Search Day, Channel and Type and the press <**Search**>.
   - Refer to "**Using the Calendar**". (Page 33)
     Click on the calendar <▦> to display the calendar window.

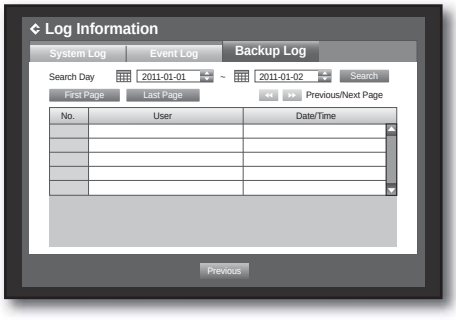


Backup Log

You can find out who backed up and the details (backup time, channel, device to use, file format, etc.).

Using the mouse may help make setup easier.

1. In the <**System**> window, press the up/down (▲▼) button to move to <**Log Information**> and press the [**ENTER**] button.
2. Select <**Backup Log**>.
3. Use the four direction buttons (▲▼◄ ►) to move to a desired item.
4. Specify a search term and select <**Search**> in the right corner.
   Backup details for the search term will be listed.



SETTING THE DEVICE

You can configure the settings of: Camera, Storage Device, Remote Device and Monitor.

Camera

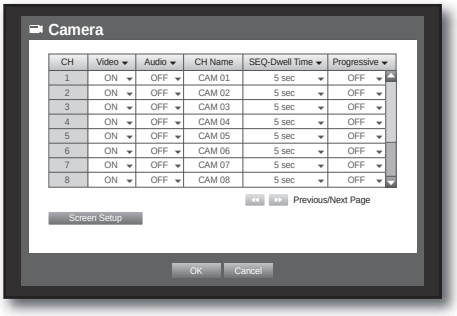
Setting the Camera

You can set Video, Audio, Channel Name and Dwell Time of a Camera.

Using the mouse may help make setup easier.

1. Press the [**MENU**] button on the remote control or front panel.
2. Use the left/right button (◄ ►) to select <**Device**>. Device setting menu is selected.
3. Use the up/down buttons (▲▼) to move to <**Camera**>, and press [**ENTER**] button.

4. Select <**Camera**>.
   You will see a window where you can configure the camera settings including Video, Audio, Channel Name, Dwell Time and Progressive.
5. Use direction buttons (▲▼◄ ►) to move to a desired item, and set the value.


Camera
CH
Video
Audio
CH Name
SEQ-Dwell Time
Progressive
1 ON OFF CAM 01 5 sec OFF
2 ON OFF CAM 02 5 sec OFF
3 ON OFF CAM 03 5 sec OFF
4 ON OFF CAM 04 5 sec OFF
5 ON OFF CAM 05 5 sec OFF
6 ON OFF CAM 06 5 sec OFF
7 ON OFF CAM 07 5 sec OFF
8 ON OFF CAM 08 5 sec OFF
Previous/Next Page
Screen Setup
OK
Cancel

- Video
  - <**ON/OFF**> : You can turn ON/OFF the selected channel's camera.
  - <**Covert1**> : Shows information other than the video of the selected channel.
    - For privacy protection, it does not display the video while the recording continues.
  - <**Covert2**> : Shows nothing but an empty screen while the recording continues.
- Audio
  - If set to <**ON**>, you can turn the audio of the channel ON on the Live screen.
  - If set to <**OFF**>, the channel's audio is off on the Live screen and not recorded.
    - Audio output is available for only 1 channel.
- CH Name : Up to 15 characters including blanks are allowed.
  - Refer to "**Using Virtual Keyboard**". (Page 34)
- SEQ-Dwell Time : You can set the dwell time between channels for the Live screen.
  - If set to <**OFF**>, the channel is not listed in the Auto Sequence mode.
- Progressive : You can set the progressive camera to ON/OFF.

- If you set it to <**ON**> for the progressive camera, screen flickering will be reduced.

- Screen Setup : The video appeared on the screen may vary depending on the channel's camera, configure the DVR display to your preferences.
  Select a channel and adjust the <**(Brightness)**>, <**(Contrast)**>, and <**(Color)**> of the selected channel.
- Press the <**Init**> to initialize settings back to the default 50.

6. When the camera setup is done, press <**OK**>.

Storage Device

You can check information on storage devices.

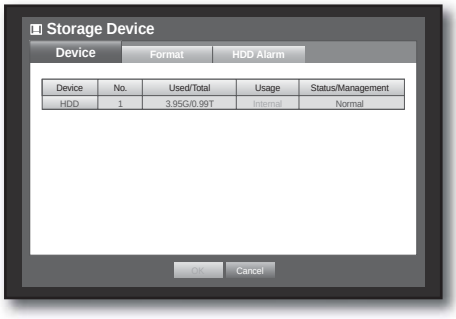
Confirming Devices

You can check storage devices and their free space, usage as well as status.
Devices available are HDD, and USB devices (Memory, HDD, CD/DVD).

Using the mouse may help make setup easier.

1. Use the up/down buttons (▲▼) in <**Device**> window to move to <**Storage Device**>, and press [**ENTER**] button.

2. Select <**Device**>.



- No. : Shows the assigned number of the internal HDD.
- Used/Total : Shows the used/total capacity of the storage device.
- Usage : Sets the storage device's usage.
  - USB memory is used only for backups.
    - External USB HDD is used for extension and backup purposes.
- Status/Management : Shows the current status of the HDD, as in Normal/Check/Replace.
  - Normal : Available to use
  - Check : Available to use but recommended to replace
  - Replace : Requires immediate replacement.

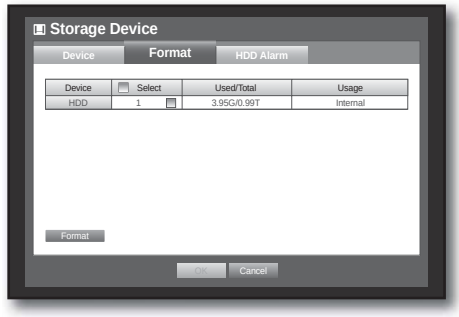
3. To move to the previous menu, press <**OK**>.

Formatting

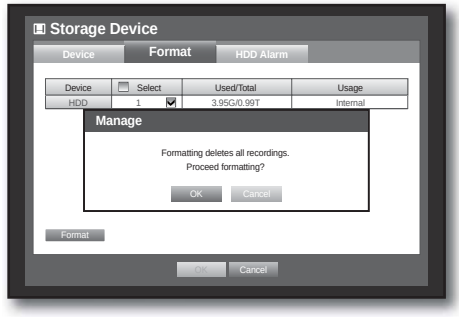
You can format a storage device.

Using the mouse may help make setup easier.

1. Use the up/down buttons (▲▼) in <**Device**> window to move to <**Storage Device**>, and press [**ENTER**] button.
2. Select <**Format**>.
   A window for selection of device for formatting appears.
3. Use direction buttons (▲▼◄ ►) to select a device to be formatted.



4. Select <**Format**> on the bottom of the screen.
   Press <**OK**> on the "**Manage**" confirmation window will start formatting the selected device.
5. When the formatting is done, press <**OK**>.

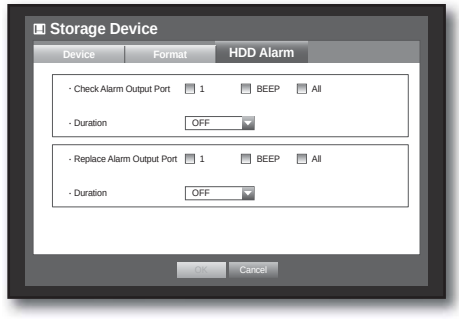


HDD Alarm

You can set alarm settings for HDD defects such as Check Alarm Output Port, Replace Alarm Output Port, and its duration.

Using the mouse may help make setup easier.

1. Use the up/down buttons (▲▼) in <**Device**> window to move to <**Storage Device**>, and press [**ENTER**] button.
2. Select <**HDD Alarm**>.
   A window for setting HDD check and replace output ports and their durations appears.
3. Use direction buttons (▲▼◄ ►) to move to the desired item.



- Alarm
  - Alarm signal will output through the alarm out port on the rear side when selected <**1**>.
  - If <**BEEP**> was selected, a beep will sound.
  - If <**All**> was selected, both beep sound and alarm signal through rear side ports will output.
- Check Alarm Output Port : If HDD generates check alarm, the alarm signal will output to the specified alarm output port.
- Replace Alarm Output Port : If HDD generates replace alarm, the alarm signal will output to the specified alarm output port.

• Duration : Sets the alarm duration for the alarm signal and beep sound.

- <**Check**> status means that the HDD is operating but it has problems that require technical examination. ( ) appears on the Live screen.
- <**Replace**> status means that the HDD has defect and requires immediate replacement. ( ) appears on the Live screen.

4. When the HDD Alarm setup is done, press <**OK**>.

Remote Devices

You can set the Remote Control ID with the DVR.

Using the mouse may help make setup easier.

1. Use the up/down buttons (▲▼) in <**Device**> window to move to <**Remote Device**>, and press [**ENTER**] button.

2. Use direction buttons (▲▼◄ ►) to move to the desired item, and press [**ENTER**] button.

3. Make sure to match IDs of the DVR and Remote Control, and press <**OK**>.

- For changing the remote control's ID, refer to "**Changing the Remote Control ID**". (Page 11)

Monitor

You can configure information to be displayed.

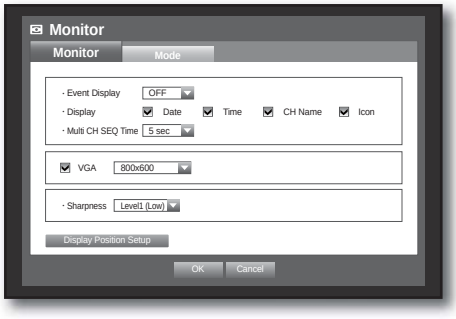
Setting the Monitor

Using the mouse may help make setup easier.

1. Use the up/down buttons (▲▼) in <**Device**> window to move to <**Monitor**>, and press [**ENTER**] button.

2. Select <**Monitor**>.

3. Use direction buttons (▲▼◄ ►) to move to a desired item, and set the value.



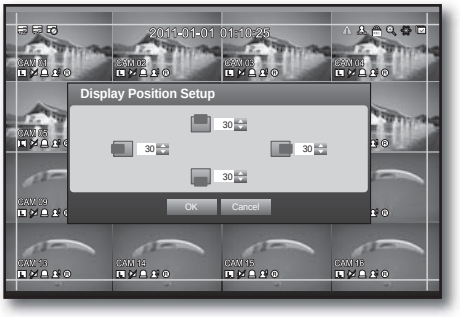
- Event Display : Sets the dwell time of the event channel display on the monitor when an event occurs. If selected <**Continuous**>, it displays the channel until you press [**ALARM**] button to release it.
- Display : Displays only checked items on the monitor screen.
- Multi CH SEQ Time : Sets the interval between automatic display switching in 4-split and 9-split mode of the Live screen.
- VGA : Select the output resolution.
- Sharpness : You can adjust the sharpness of the video output signal.

4. When the monitor setup is done, press <**OK**>.

Screen Setup

Some monitors many not display information (camera name, icon, time information, etc.) about the DVR, depending on the condition. Then, you can change the display position of the data.

1. In the <**Device**> window, press the up/down (▲▼) button to move to <**Monitor**> and press the [**ENTER**] button.
2. Select the <**Monitor**> item.
3. Select <**Display Position Setup**> in the bottom.
   You will move to the <**Display Position Setup**> window.
4. Use the four direction buttons or the number buttons on the front panel or the remote control to adjust the data position.



Setting the Screen Mode

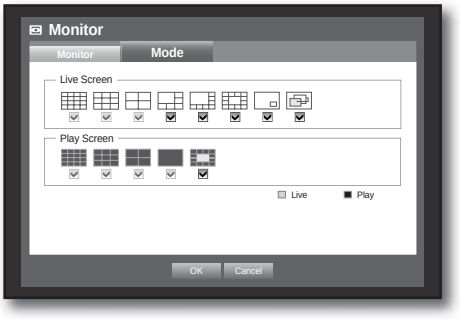
You can configure the Live screen and Split Screens.

Using the mouse may help make setup easier.

1. Use the up/down buttons (▲▼) in <**Device**> window to move to <**Monitor**>, and press [**ENTER**] button.
2. Select <**Mode**>.
3. Use direction buttons (▲▼◄ ►) to move to a desired item, and set the value.

- Live Screen : Select split modes for the Live screen.
  16-, 9-, and 4-split screens are included by default.
  SDE-4001 doesn't support 16-split screen mode.
- Play Screen : Select split modes for the playback screen.
  Only the 13-split screen is optional.
  Black shows the playback while white shows the Live screen.

4. When the screen mode setup is done, press <**OK**>.



SETTING THE RECORDING

You can setup scheduled recording, event recording and other recording related settings.

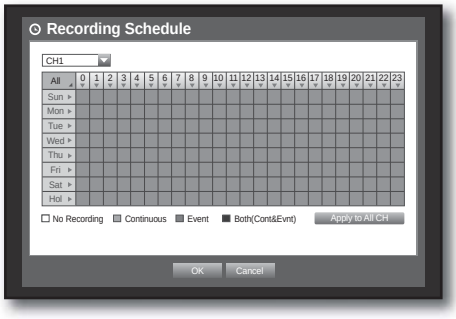
Recording Schedule

Make your reservation on a date and time to schedule the recording on specified time.

Using the mouse may help make setup easier.

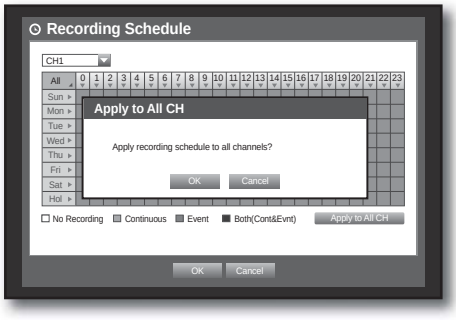
1. Press the [**MENU**] button on the remote control or front panel.
2. Use the left/right button (◄ ►) to select <**Record**>. Record menu is selected.
3. Use the up/down buttons (▲▼) to move to <**Recording Schedule**>, and press [**ENTER**] button.

4. Select <**Recording Schedule**>. A window of scheduled recording setup appears.
5. Use direction buttons (▲▼◄ ►) to move to a desired item, and set the value.



- Apply to All CH : If selected <**Apply to All CH**>, "**Apply to All CH**" window appears. Press <**OK**> to apply the setup to all channels.

6. When the recording schedule setup is done, press <**OK**>.



- Event recording and scheduled recording starts about 3 seconds prior to the event/schedule for guaranteed recording.

Recording Color Tags

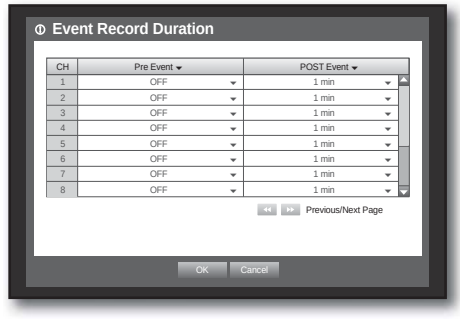
Color	Function	Description
White	No Recording	No schedule / event recording
Orange	Continuous	Scheduled recording only
Blue	Event	Event recording only
Green	Both(Cont&Evnt)	Both scheduled / event recordings

Each press of a selected cell will cycle through <**No Recording**>-<**Continuous**>-<**Event**>-<**Both(Cont&Evnt)**>.

Event Record Duration

You can set the beginning and ending point of a recording on an event.

Using the mouse may help make setup easier.



1. Use the up/down buttons (▲▼) in <**Record**> window to move to <**Event Record Duration**>, and press [**ENTER**] button.
2. Use direction buttons (▲▼◄ ►) to move to a desired item, and set the value.

- Pre Event : The recording of an event will start at a pre-determined time prior to the actual occurrence of the event. If it is set to 5 seconds, the recording begins from 5 seconds before the event.
- POST Event : The recording will continue for a pre-determined time after the actual end of an event. If it is set to 5 seconds, the recording ends in 5 seconds after an event.

3. When the event recording duration setup is done, press <**OK**>.

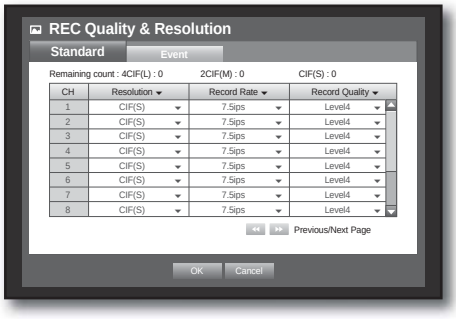
REC Quality / Resolution

You can set resolution, IPS, and quality of recordings by channel, and by recording type of standard / event.

Setting Standard Recording Properties

You can set each channel's resolution, quality and IPS for normal recordings.

Using the mouse may help make setup easier.



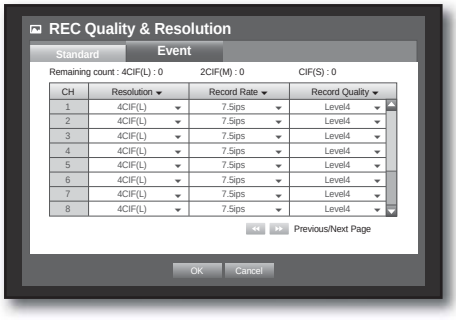
1. Use the up/down buttons (▲▼) in <**Record**> window to move to <**REC Quality & Resolution**>, and press [**ENTER**] button.
2. Select <**Standard**>.
3. When the recording setup is done, press <**OK**>.

- Remaining count : If you change the settings of the resolution and the remaining rate, the frame rate available for each resolution will be recalculated.
  - The remaining frame rate for each channel is a sum of values from both standard recording and event recording.
    If the remaining rate is zero or no other page has a remaining rate available, you cannot increase the value of the remaining rate.
    If this is the case, reduce the recording count of the current page, or do so for the same channel on any other page.

Setting Event Recording Properties

You can set each channel's resolution, quality and IPS for event recordings.

Using the mouse may help make setup easier.



1. Use the up/down buttons (▲▼) in <**Record**> window to move to <**REC Quality & Resolution**>, and press [**ENTER**] button.
2. Select <**Event**>.
   Event recording setup window appears.
3. Use direction buttons (▲▼◄ ►) to move to a desired item, and select it.

- Resolution : Sets the resolution of the recorded screen.
- Record Rate : Image Per Second, means the frames recorded per a second.
- Record Quality : Sets the recording quality.

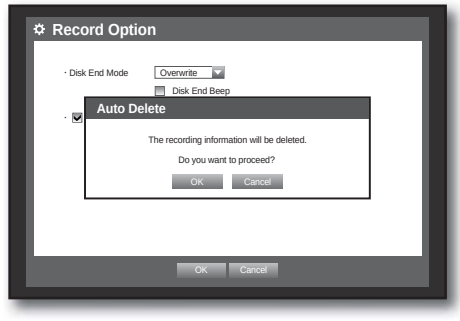
- Only if the resolution is set to 4CIF, you can select Level 9 for the recording quality.
  However, Level 9 is available only if you select a level for each and every channel.
  If the resolution is set to 1CIF or 2CIF, the possible resolution is up to Level 8.
- The estimated total remaining count means the total number of remaining recordings for both standard and event recordings.
- You cannot increase the remaining count if the current remaining count has reached zero or there is no available remaining count from any other page. If this is the case, reduce the remaining count for the current page, or do so for the same channel on any other page.

4. When the Event recording setup is done, press <**OK**>.

Record Option

You can set the recording to stop or overwrite when the HDD is full.

Using the mouse may help make setup easier.



1. Use the up/down buttons (▲▼) in <**Record**> window to move to <**Record Option**>, and press [**ENTER**] button.
2. Use direction buttons (▲▼◄ ►) to move to a desired item, and set the value.

- Disk End Mode : If selected <**Overwrite**>, recording will continue despite the HDD full while overwriting the oldest. If selected <**Stop**>, the recording will stop when the HDD is full.
- Disk End Beep : If selected <**Stop**>, the button is activated. If you check it, the beep will sound on the disk full and the recording stops.
- Auto Delete : If you check it, Record Period setup is activated. If you specify the auto deletion period, the recording data before the period will be deleted automatically. (This option will be enabled only if Disk End Mode is set to “Overwrite”.)

3. When the recording option setup is done, press <**OK**>.

SETTING THE EVENT

You can set recording options for sensor, motion, and video loss event.

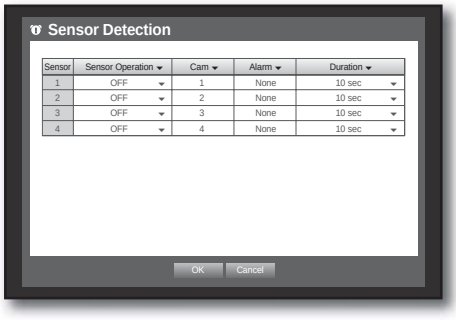
Sensor Detection

You can set the sensor's operating condition and connected camera, as well as alarm output and its duration.

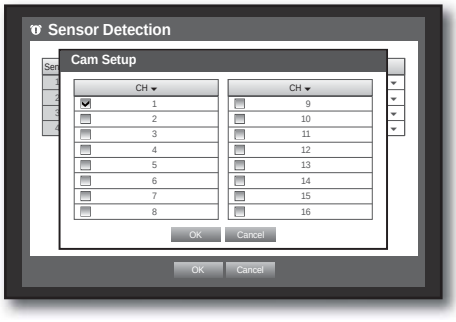
Using the mouse may help make setup easier.

1. Press the [**MENU**] button on the remote control or front panel.
2. Use the left/right button (◄ ►) to select <**Event**>.
   Event setting menu is selected.

3. Use the up/down buttons (▲▼) to move to <**Sensor Detection**>, and press [**ENTER**] button.
   A window of sensor detection setup appears.
4. Use direction buttons (▲▼◄ ►) to move to a desired item, and set the value.

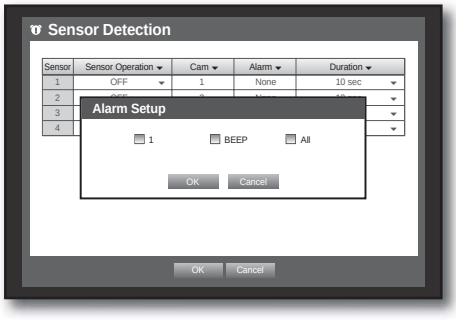


- Sensor Operation : Sets the operation mode of sensors.
  - <**OFF**> : Sensor does not operate.
  - <**N.O (Normal Open)**> : Sensor is opened.
    If the sensor is closed, it generates alarm.
  - <**N.C (Normal Close)**> : Sensor is closed.
    If the sensor is open by interruption, it generates alarm.
- Cam : Select a channel to be connected to the sensor.
  If selected camera, "**Cam Setup**" window appears.
  Select a channel and setup the preset.
  SDE-4001 could only preset 8 channels.



- Alarm : Sets the alarm output method.
  - For further information on alarm output, refer to "**HDD Alarm** > **Alarm**". (Page 44)
- Duration : Sets the duration of alarm signal and alarm sound.

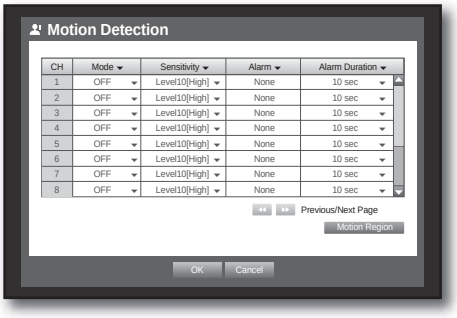
5. When the sensor detection setup is done, press <**OK**>.



Motion Detection

You can set target detection region and motion, as well as the alarm signal output.
When the motion detection region is set, it detects motion within the area.

Using the mouse may help make setup easier.



1. Use the up/down buttons (▲▼) in <**Event**> window to move to <**Motion Detection**>, and press [**ENTER**] button. A window of motion detection area setup appears.
2. Use direction buttons (▲▼◄ ►) to move to a desired item, and set the value.

- Mode : Sets whether to activate motion detection.
- Sensitivity : Sets the sensitivity level of the motion detection.
- Alarm : Sets the alarm output method.
  - For further information on alarm output, refer to "**HDD Alarm** > **Alarm**". (Page 44)
- Alarm Duration : Sets the duration of alarm signal and alarm sound.

3. When the motion detection setup is done, press <**OK**>.

Setting the Motion Detection Area

① Select <**Motion Region**>.
② When "**Motion Region**" window appears, select a channel for detection and set the area of motion detection.

- To set the area in "**Motion Region**" window

In the "**Motion Region**" window, select desired region from <>.

- To set the area using <**Individual**> selection

In the "**Motion Region**" window, you can select cells individually by using <**Individual**>.
When selected <**Individual**>, "**Motion Region**" window disappears and you can select cells one by one.
When the motion area setup is done, press the <**Menu**> on the screen or the [**MENU**] button on the remote control or front panel to display the "**Motion Region**" window again.

- Select : Selected cell is set to be a part of motion detection area.
- Unselect : Selected cell is removed from the motion detection area.
- Inverse : Unselected cells are set to be the motion detection area.
- Menu : After selecting individual motion areas, move to the "**Motion Region**" window.
  - If selected <**Apply to All CH**>, selected motion area is applied to all channels.

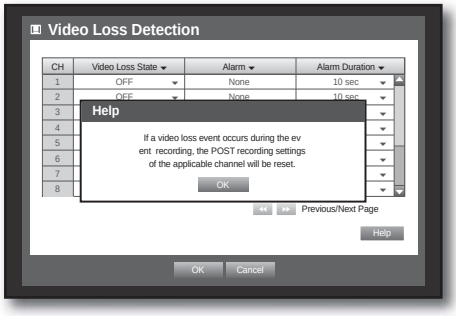
③ When the motion detection setup is done, press <**OK**>.

Video Loss Detection

You can set the alarm to be generated on a camera disconnection, which causes a video loss.

Using the mouse may help make setup easier.

1. Use the up/down buttons (▲▼) in <**Event**> window to move to <**Video Loss Detection**>, and press [**ENTER**] button.
   A window of video loss detection area setup appears.
2. Use direction buttons (▲▼◄ ►) to move to a desired item, and set the value.



- Video Loss State : Sets whether to activate video loss detection.
- Alarm : Sets the alarm output method.
  - For further information on alarm output, refer to "**HDD Alarm** > **Alarm**". (Page 44)
- Alarm Duration : Sets the duration of alarm signal and alarm sound.
- Help : Displays a help message that will appear if a video loss event occurs.

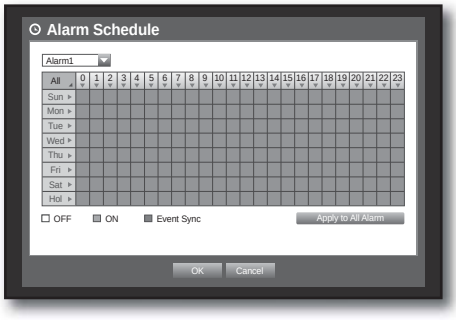
3. When the video loss detection setup is done, press <**OK**>.

Alarm Schedule

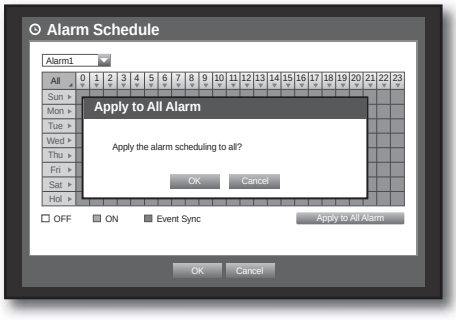
You can set the conditions and operating hours for scheduled alarms.

Using the mouse may help make setup easier.

1. Use the up/down buttons (▲▼) in <**Event**> window to move to <**Alarm Schedule**>, and press [**ENTER**] button.
2. A window of <**Alarm Schedule**> settings appears.



- Alarm : Sets the alarm output method.
  - For further information on alarm output, refer to "**HDD Alarm** > **Alarm**". (Page 44)
- <**ON**> : Marked in orange, and always generates alarm on scheduled time.
- <**OFF**> : Marked in white, no alarm is generated even if an event occurs.
- Event Sync : Marked in Blue, generates alarm only when an event occurs.
- Apply to All Alarm : Applies the configured schedule to all alarms.



- When the alarm is generated on the scheduled time, you can stop the alarm by canceling the schedule.

3. When the Alarm Schedule setup is done, press <**OK**>.

BACKUP

You can check the backup device and set the backup schedule by channel or by time.
The product only supports external HDD of USB memory and USB type. (Page 93)

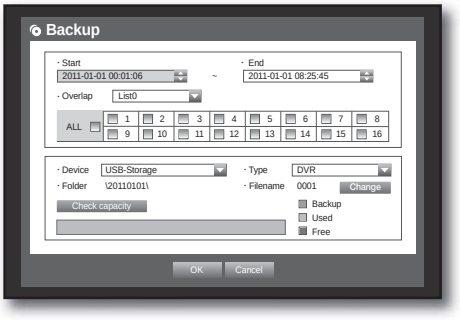
Setting the Backup

You can backup the desired data to a connected device.

Using the mouse may help make setup easier.

1. Press the [**MENU**] button on the remote control or front panel.
2. Use the left/right button (◄ ►) to select <**Backup**>. Backup menu is selected.

3. Press the [**ENTER**] button.
   A backup window appears.
   You can directly access it from the "**Live screen menu**". (Page 24)
4. Use direction buttons (▲▼◄ ►) to move to a desired item, and set the value.



- Backup Range : Sets the <**Start**> and <**End**> time for the backup.
- Channel : Sets the channel to backup.
  You can select multiple channels.
- Device : Select a backup device from the recognized devices.
- Type : Sets the backup data format.
  - AVI : Saves the CODEC information provided by the DVR with the recording data, and saved data can be played back by using external viewers (such as Windows Media Player) on a PC.
  - DVR : Saved data can be played back only by the DVR.
  - SEC : Saves data in the Samsung's proprietary format with built-in viewer, which supports immediate playback on a PC.
- Filename : You can set the back file name.
  - Refer to "**Using Virtual Keyboard**". (Page 34)
- Check capacity : Shows the size of the selected backup data, used and available capacity of the selected backup device.
- Overlap : Shows a list of overlapping data on a same time according to the number of data.
  It appears when one channel has multiple data on a certain time point due to changing of time or time zone settings, etc.
  - Refer to time and time zone of "**Setting the Date/Time/Language**". (Page 32)

5. When the backup setup is done, press <**OK**>.
   - If no available device is recognized for backup, <**OK**> button is not activated.

- The application may slow down during the backup.
- You can switch to the menu screen during the backup in operation, but playback of data is not available.
- When a memory device is used for backup, it is not available to use the full capacity of the media because the system consumes a portion of its capacity.

- Pressing the <**Exit**> during the backup will return to the previous menu, while the backup progresses.

NETWORK CONFIGURATION

It provides networked monitoring of Live screen from a remote place, and supports mail forwarding function with events. You can configure the network environment which enables such functions.

Connection Mode

You can set the network connection route and protocol.

Setting the Connection

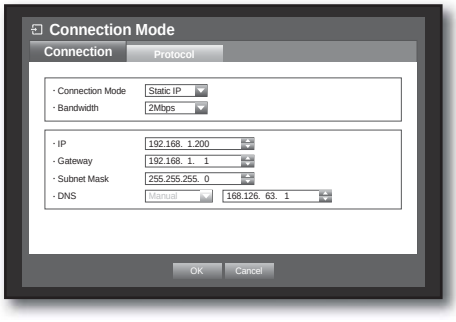
Sets the protocol and environment of the network.

Using the mouse may help make setup easier.

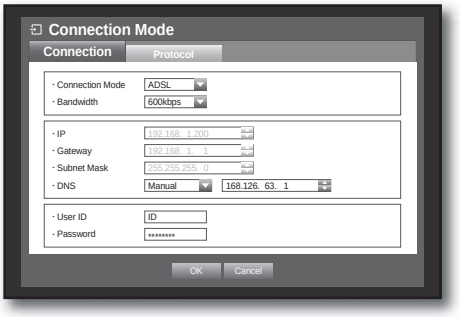
1. Press the [**MENU**] button on the remote control or front panel.
2. Use the left/right button (◄ ►) to select <**Network**>. Network menu is selected.
3. Use the up/down buttons (▲▼) to move to <**Connection Mode**>, and press [**ENTER**] button.

4. Select <**Connection**>.
   A window of connection mode setup appears.
5. Use direction buttons (▲▼◄ ►) to move to a desired item, and set the value.

- Connection Mode : Sets the network connection mode.
- Bandwidth : Sets the maximum data flow to be transferred. (Upload speed)
  Options will vary depending on the selected connection mode.
  - For <**Static IP**>, <**Dynamic IP**> : Select one from 50 kbps ~ 2Mbps, and Unlimited.
  - For <**ADSL**>, select one from 50 kbps ~ 600 kbps.



- IP, Gateway, Subnet Mask, and DNS
  - For <**Static IP**> : You can directly input IP address, Gateway, Subnet Mask and DNS.
  - For <**Dynamic IP**> : IP address, Gateway, and Subnet Mask are set automatically.
  - For <**ADSL**> : IP address, Gateway, and Subnet Mask are set automatically.
- User ID, Password : In case you selected ADSL, provide the "**User ID**" and its "**Password**".



■ DNS server for <**Dynamic IP**> and <**ADSL**> can be set by user only if you selected <**Manual**>.

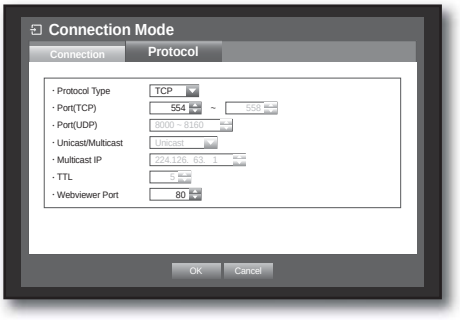
6. When the connection setup is done, press <**OK**>.

Setting the Protocol

1. Use the up/down buttons (▲▼) in <**Network**> window to move to <**Connection Mode**>, and press [**ENTER**] button.

2. Select <**Protocol**>.

3. Use direction buttons (▲▼◄ ►) to move to a desired item, and set the value.



- Protocol Type : Select the protocol type between TCP and UDP.
  - ■ If selected UDP, selections of Port (TCP), Port (UDP), and Unicast/ Multicast are activated.
- Port (TCP) : Initially, <**554~558**> is set. It increases / decreases by 5.
  - TCP : It has better stability and lower speed when compared to UDP, and recommended for internet environments.
- Port (UDP) : Initially, <**8000~8160**> is set. It increases / decreases by 160.
  - UDP : It has less stability and faster speed when compared to TCP, and recommended for local area network (LAN) environments.
- Unicast/Multicast : Select one between Unicast and Multicast.
  If selected Multicast, Multicast IP and TTL are activated.
  - Unicast : Transfers data (UDP, TCP) individually to each connecting client.
  - Multicast : Multiple client can receive the data (only in UDP) without putting additional traffic load to the network.
- Multicast IP : User can directly input.
- TTL : Select from 0 ~ 255. Initial value for the TTL is set to <**5**>.
- Webviewer Port : Enter the port number for the Web Viewer. Initially, it is set to <**80**>.

■ As UDP protocol may cause a packet loss on the network, it is recommended to use TCP protocols.

■ If you select UDP protocols and set port forwarding in the IP router, ending up with an unstable network connection, configure the DMZ settings in the IP router as necessary.

4. When the protocol setup is done, press <**OK**>.

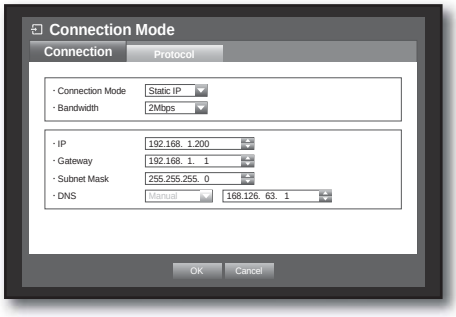
Connecting and Setting the Network

Networking may differ from the connection method, check your environment before setting the connection mode.

When no router is used

• Static IP mode

- Internet connection : Static IP ADSL, leased line, and LAN environments allows connection between the DVR and remote user.
- DVR Network Settings : Set the <**Connection Mode**> in <**Connection**> menu of the connected DVR to <**Static IP**>.
  - Consult your network manager for IP, Gateway and Subnet Mask.

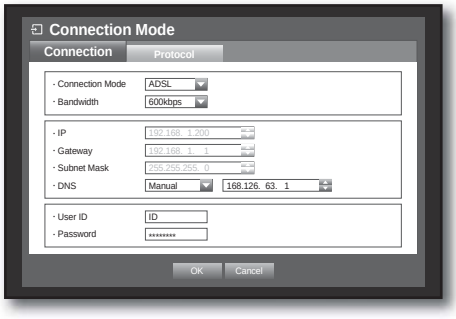


• Dynamic IP (DHCP) mode

- Internet connection : Connect the DVR directly to a cable modem, DHCP ADSL modem or FTTH network.
- DVR Network Settings : Set the <**Connection Mode**> in <**Connection**> menu of the connected DVR to <**Dynamic IP**>.

• ADSL (PPPoE: ID and password certification)

- Internet connection : An ADSL modem is directly connected to the DVR, where the ADSL connection requires user ID and password.
- DVR Network Settings : Set the <**Connection Mode**> in <**Connection**> menu of the connected DVR to <**ADSL**>.
  - ADSL <**User ID**> and <**Password**> should be the same to the ADSL user information.
    If you don't know the ID and password, consult your ADSL service provider.



When a router is used

- To avoid IP address conflict with the DVR's static IP, check followings :

• Setting the DVR with a static IP

- Internet connection : You can connect the DVR to a router which is connected to an ADSL/Cable modem or a router in a Local Area Network (LAN) environment.

• **Setting the DVR Network**

1. Set the <**Connection Mode**> in <**Connection**> menu of the connected DVR to <**Static IP**>.
2. Check whether the set IP address is in the static IP range provided by the IP router.
   IP, Gateway, and Subnet Mask : Consult your network manager.
   - Check whether the set IP address is in the static IP range provided by the IP router.

- If a DHCP server is configured with starting address (192.168.0.100) and end address (192.168.0.200), you should set the IP address out of the configured DHCP range (192.168.0.2 ~ 192.168.0.99 and 192.168.0.201 ~ 192.168.0.254).

3. Check the Gateway address and subnet mask are equal to those set in the IP router.

• **Setting the DHCP IP Address of the IP router**

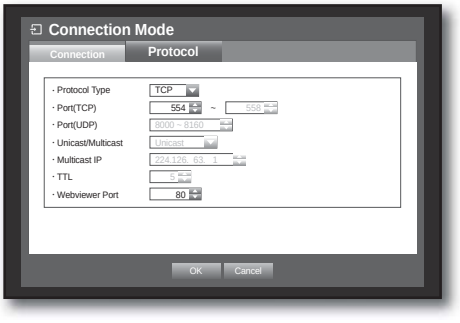
1. To access the IP router's configurations, open a web browser on the local PC that is connected to the IP router and enter the router's address (ex : http://192.168.1.1).
2. At this stage, make the local PC's windows network configurations to the below example :
   Ex) IP : 192.168.1.2
   Subnet Mask : 255.255.255.0
   Gateway : 192.168.1.1

- Once connected to the IP router, it prompts with password. While entering nothing to the User Name field, enter "**admin**" into the password field and press <**OK**> to access the router configurations.
- Access the router's DHCP configuration menu and set its DHCP server activation, and provide the start and end address.
  Set the start address (192.168.0.100) and end address (192.168.0.200).

- Above steps may differ from the router devices depending on the manufacturer.

• **Setting Router's Port Forwarding**

1. Set the protocol to <**TCP**>.
2. External Port Range : Enter the TCP Port set in the <**Port(TCP)**> in <**Protocol**> menu of the connected DVR. If more than one DVRs are connected to the router, the TCP port can be different.
3. Internal PC IP Address : Enter the IP address set to the <**IP**> in <**Connection**> menu of the connected DVR.
4. Internal Port Range : Set the same to the "**External Port Range**".



- Above steps may differ from the router devices depending on the manufacturer.
  Port forwarding is required when you want to access the DVR connected to the router from outside of the router's network.

DDNS

You can set the DDNS site for a remote user's network connection.

Using the mouse may help make setup easier.

1. Use the up/down buttons (▲▼) in <**Network**> window to move to <**DDNS**>, and press [**ENTER**] button.
2. Use virtual keyboard to enter user inputs.
   - Refer to "**Using Virtual Keyboard**". (Page 34)
   - If selected <**OFF**> or <**Samsung DDNS**>, input fields are deactivated.
   - DDNS Host Address only appears when Samsung DDNS is selected.
3. When the DDNS setup is done, press <**OK**>.

DDNS Setting

DDNS is a short form of Dynamic Domain Naming System.
DNS (Domain Name System) is a service that routes a domain name consisting of user friendly characters (ex : www.google.com) to an IP address consisting of numbers (64.233.189.104).
DDNS (Dynamic DNS) is a service that registers a domain name and the floating IP address with the DDNS server so that the domain name can be routed to the IP address even if the IP is changed in a dynamic IP system.

- **Setting DDNS in the DVR**

  Set <**Protocol Type**> in the <**Protocol**> menu of the connected DVR to the following :

  Ex) Protocol Type : TCP
  Port (TCP) : 0554,0555,0556,0557,0558
  DDNS Site : Samsung DDNS

- **DDNS Settings of the Router**

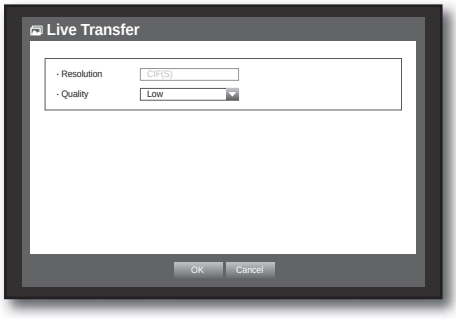
  Select the corresponding menu for the network transfer protocol of the router.

Live Transfer

Sets the quality of the image that is transferred from the DVR to the network.

Using the mouse may help make setup easier.

1. In the <**Network**> setting window, press the up/down (▲▼) button to move to <**Live Transfer**> and press the [**ENTER**] button.
   The Live Transfer window appears.
2. Use the direction buttons (▲▼◄ ►) to move to a desired item and set the value.
3. When the live transfer is done, press <**OK**>.



Mailing Service

You can send an e-mail to a DVR-registered user at a specific time interval, or if an event occurs.

- If an event occurs with a channel where the camera's video is set to <**OFF**> or the remaining recording count is set to <**OFF**>, only the text notification will be sent to the applicable email address.
- The e-mail receivers are not able to adjust the attached image quality.

SMTP Setting

Sets the SMTP mail server.

Using the mouse may help make setup easier.

1. In the <**Network**> setting window, press the up/down (▲▼) button to move to <**Mailing Service**> and press the [**ENTER**] button.
2. Select <**SMTP**>.
   You will see the SMTP setting window.
3. Use direction buttons (▲▼◄ ►) to move to a desired item and set the value.

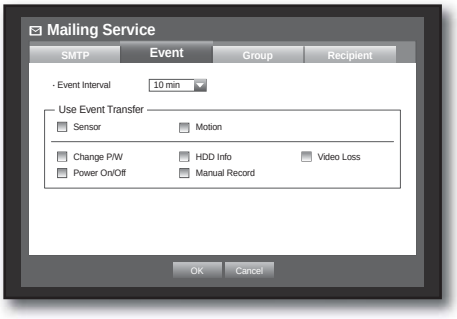
- ServerType : Displays the connected server type.
- Server : Enter a server to connect to.
- Port : Sets the communication port.
- Use Authentication : Check this if the SMTP server uses user authentication. The account input box will be activated.
- User : Enter a user to use authentication when connecting to the SMTP server.
- Password : Enter the password of the SMTP server user.
- Secure Transfer : Select one from <**Never**> and <**TLS (if available)**>.
- Sender : Use the virtual keyboard to enter the sender's e-mail address.
  - Refer to "**Using Virtual Keyboard**". (Page 34)
- TEST : Conducts the test on the server settings.

4. When the SMTP setting is done, press <**OK**>.

Event Setting

You can set the interval and type of the event that will be sent to the user.

Using the mouse may help make setup easier.



1. In the <**Network**> setting window, press the up/down (▲▼) button to move to <**Mailing Service**> and press the [**ENTER**] button.
2. Select <**Event**>.
3. Use direction buttons (▲▼◄ ►) to move to a desired item and set the value.

- Event Interval : Set the event interval.
  - If a series of events occurs, the e-mail will be sent at the specified interval, not on each event.
- Use Event Transfer : Select an event type to send if an event occurs.
  If the selected event occurs, the e-mail will be sent to the group that has the recipient authority.

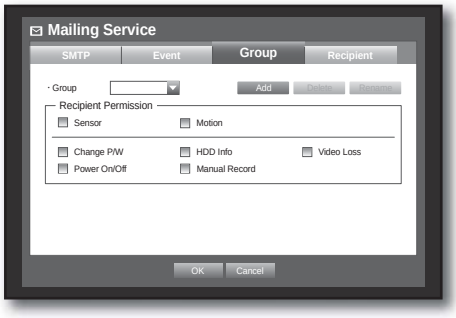
4. When the event setting is done, press <**OK**>.

Group Setting

You can set the group to whom the e-mail is sent, and specify the permission for each group.
You can add recipients for each group in the <**Recipient**> menu item.
The recipient is set separately from the DVR user group.

Using the mouse may help make setup easier.

1. In the <**Network**> setting window, press the up/down (▲▼) button to move to <**Mailing Service**> and press the [**ENTER**] button.
2. Select <**Group**>.
3. Use direction buttons (▲▼◄ ►) to move to a desired item and set the value.



- Add : Select <**Add**> and use the virtual keyboard to add a group.
  - Refer to "**Using Virtual Keyboard**". (Page 34)
- Delete : Deletes the selected group.
- Rename : You can reset the recipient permission of an existing group.
- Recipient Permission : Set the permission of the recipient group.

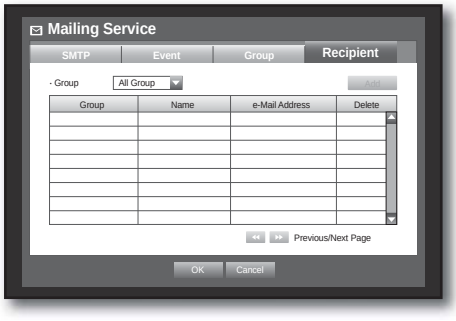
4. When the group setting is done, press <**OK**>.

Recipient Setting

You can add/remove a recipient(s) to/from the specified group and edit the group if necessary.

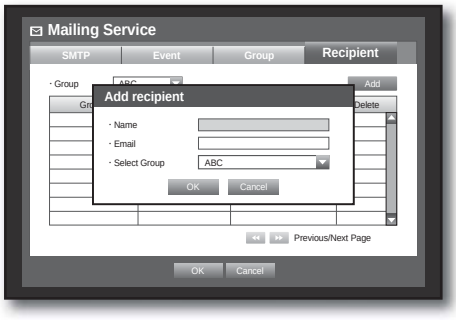
Using the mouse may help make setup easier.

1. In the <**Network**> setting window, press the up/down (▲▼) button to move to <**Mailing Service**> and press the [**ENTER**] button.
2. Select <**Recipient**>.
3. Use direction buttons (▲▼◄ ►) to move to a desired item and set the value.



- Add : You can select a recipient name, e-mail address or group.
  You should have created a group in the <**Group**> menu item before you can add a user to the group.
  - For inputting the recipient name and email address, refer to "**Using Virtual Keyboard**". (Page 34)

4. When the recipient setting is done, press <**OK**>.



SEARCH

You can perform the search for recorded data by the time or by the search criteria such as an event.
You can access the <**Search**> menu directly in Live mode.

1. In Live mode, right-click any area of the screen.
   The Live menu appears.
2. Select <**Search**>.
   Or, press the [**SEARCH**] button on the remote control or the front panel.

3. The Search menu appears.
4. The search can be restricted by the Auto Delete function.
   Refer to "**Setting the Recording** > **Record Option**". (Page 50)

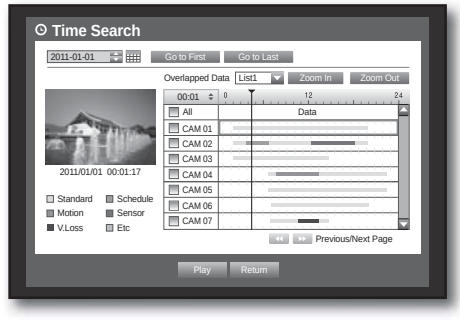
- Overlapped data : It only appears if there exists overlapped data on a certain time, produced due to the change of DVR's time setup. The latest data comes first, from <**List0**>. It does not appear in <**Backup Search**>.

Time Search

You can search for recorded data of a desired time.
As the time to display may be different depending on the time zone and the DST standard time, the time of data recorded in the same time can be displayed differently depending on time zone and DST settings.

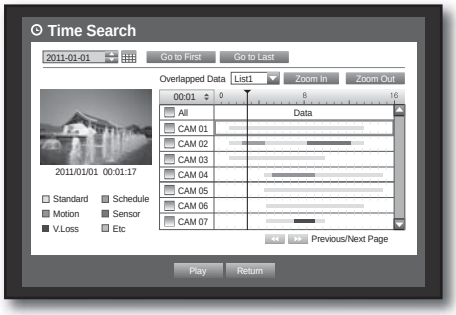
Using the mouse may help make setup easier.

1. Select <**Time Search**> in the <**Search**> menu.
2. Select a date to search.
   - Refer to "**Using the Calendar**". (Page 33)
3. The record data on the specific date will be listed.
   The display bar is different according to the data type.
   So check the data type for the color in the left pane.
4. Use direction buttons (▲▼◄ ►) to set the search criteria and press the [**ENTER**] button.



- Go to First : Moves to the earliest date.
- Go to Last : Moves to the most recent date.
- Time : Enter a time to perform the search or use the up/down button <▲▼> to select one.

- Zoom In : The map enlarges in detail.
  It will switch in the sequence of 24 hours - 16 hours - 8 hour - 4 hours.
- Zoom Out : The map will switch in the reverse order of the detailed mode above.
  It will switch in the sequence of 4 hours - 8 hour - 16 hours - 24 hours.



■ Double-click a desired time to zoom it in/out.

- Preview : Click <**Channel**> and select (click, drag) a time in <**Duration**> to display a still image for the portion.
  - If the selected channel does not contain any recorded data, it will be marked black.

5. Select a data item and click <**Play**>.
The screen switches to the data playback mode.

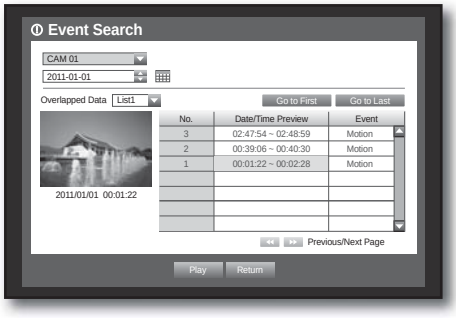
Event Search

You can search for events by the channel and play them.

Using the mouse may help make setup easier.

1. Select <**Event Search**> in the <**Search**> menu.

2. Use direction buttons (▲▼◄ ►) to set the search criteria and press the [**ENTER**] button.
   ■ All record events on a specific date will be found. (Normal/ Schedule recording included)



- Date/Time Preview : If you select a data item in the list, the still image of the selected data will be displayed in the left preview pane.
- Event : Displays the type of the event that occurred.

3. Select a data item and click <**Play**>.
The screen switches to the event data playback mode.

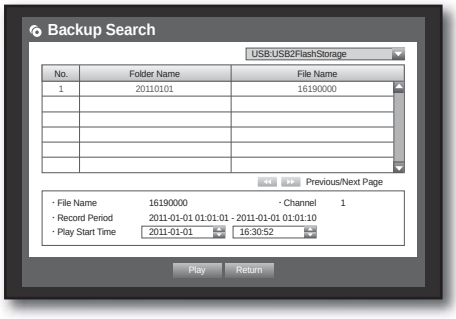
Backup Search

Searches for backup data in the connected backup device.
Only data in the format of DVR is included in the search.
Refer to <**Type**> in "**Backup** > **Setting the Backup**". (Page 54)

Using the mouse may help make setup easier.

1. Select <**Backup Search**> in the <**Search**> menu.

2. Use direction buttons (▲▼◄ ►) to set the search criteria and press the [**ENTER**] button.



- Record Period : Displays the record period.
- Channel : Displays the recorded channel.
- Play Start Time : Select a time that you start playing.

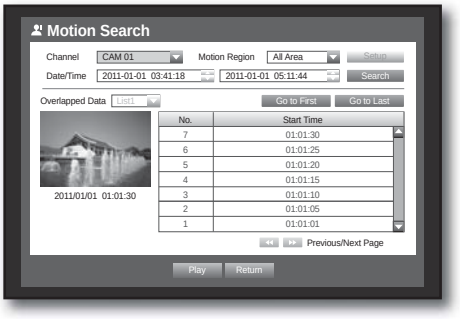
3. Select a data item and click <**Play**>.
The screen switches to the backup data playback mode.

Motion Search

If a motion is detected in each channel, you can set a desired area to perform the search.

You can use the mouse to select the related items.

1. Select <**Motion Search**> in the <**Search**> menu.
2. Use direction buttons (▲▼◄ ►) to set the search criteria and press the [**ENTER**] button.
   - If you set the motion area to <**Manual Area**>, the <**Setup**> button will be activated.



- Motion Region : Select an area to perform the search.
  - All Area : Searches for all areas of the selected channel.
  - Current Area : Searches for the motion area for each channel specified in "**Motion Detection** > **Setting the Motion Detection Area**". (Page 52)
  - Manual Area : You can set the motion area manually.
- Setup : The Setup button will be activated only if you have set the motion area to Manual. Press this button to display the area setting window.
- Date/Time : The Date/Time will be automatically set by the hour, and the end time will be automatically set to one hour later than the start time if it is set.
- Preview : Select a data item in the list to display the still image of the item.

3. Select a data item and click <**Play**>.
   The screen switches to the motion data playback mode.

Play

You can play data stored in the HDD and backup a desired portion of the data.

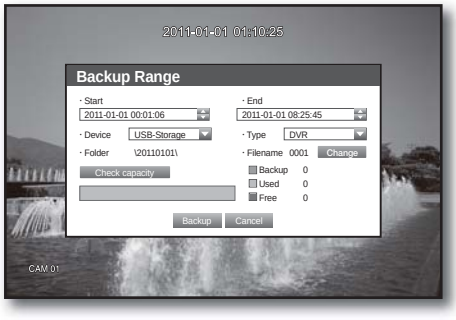
Using the mouse may help make setup easier.

1. In Live mode, click <**Play**> in the right-click menu or < ▶ > in the launcher menu, or press the Play button on the remote control or the front panel.
2. Use the up/down button (▲▼) to select a menu.
   - For data search, refer to <**Search**>. (Page 62)

3. Select a data item and click <**Play**> in the Search menu. The selected data is played and the play launcher appears on the screen.
   - If there is an existing data, <**Play**> will start immediately without performing the search.

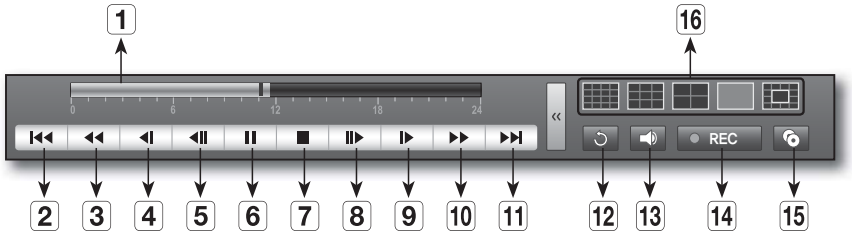
- Playback Information : Displays the date and time of the current data in the top corner.

- Backup : Click < 💿 > to set the current time to the start time of backup; you can specify a backup area using the mouse (yellow triangle).
  Click < 💿 > again to set the current time to the end time of the backup and the "**Backup Range**" window appears.
  - Type : Supports formats of DVR, AVI and SEC. Refer to a list of formats in "**Setting the Backup**". (Page 54)
  - Device : Select a backup device.
  - Check Capacity : Enables you to check the capacity of the selected storage device.



4. If you want to return to the Live screen in Play mode, click < ■ > in the launcher menu or press the [■] button on the remote control or the front panel.

Using the Playback Button



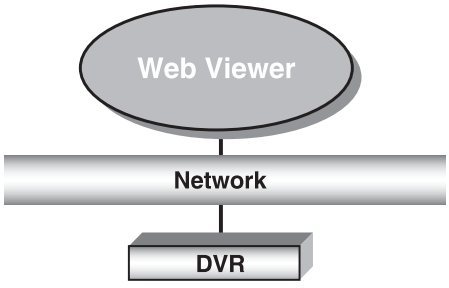
Part Names		Functions
1	Play Timeline	Indicates the current playback point, and can be used to move.
2	Skip Backward	Moves backward by unit time.
3	Backward Fast Play	Used for quick backward search while in Play.
4	Backward Slow Play	Used for backward frame-by-frame search while in PAUSE.
5	Step Backward	Moves backward by one frame at a time.
6	Pause	Stops the playback temporarily.
7	Stop	Stops playback and moves to the live screen.
8	Step Forward	Moves forward by one frame at a time.
9	Forward Slow Play	Play forward up to 4 channels simultaneously at a low speed. ▪ In a split mode, the real time playback may not be supported, depending on the record quality, resolution and number of channels. And some frame rates may be supported.
10	Forward Fast Play	Used for quick forward playback.
11	Skip Forward	Moves forward by unit time.
12	Return	Return to the previous.
13	Audio	Sets Audio ON/OFF.
14	REC	Records all channels in Live mode.
15	Partial Backup	Begins backup of the selected section of the video being played, with the specified starting/ ending point.
16	Mode Switch	Click a desired playback mode or press [**MODE**] to switch the screen mode in sequence. ▪ The gray area in the center of the 13-split mode plays the Live channel. The default channel of the Live mode is CH1, which can be changed later.

web viewer

INTRODUCING WEB VIEWER

What is Web Viewer?

Web Viewer allows remote access to your DVRs. You have access to live video, archived video etc.



PRODUCT FEATURES

- Remote access from a standard browser
- Supports 1, 4, 8, 16 camera viewing formats (maximum of 16 cameras in the list).
- Gets JPEG format images to print and save to “Print or Save JPEG format images”.
- Record video in AVI format-compatible with popular media players. (needed the Xvid codec)

SYSTEM REQUIREMENTS

The following lists the minimum suggested hardware and operating system requirements needed to run the Web Viewer.

OS	Windows XP Professional Windows 2000 Windows Vista Home Basic /Premium Windows 7
Web Browser	Internet Explorer 6.0.2900.2180 or higher (32bit only)
CPU	Intel Pentium 4, 2GHz
Memory	512 MB
Monitor	High Color 16-bit 1024 x 768
HDD	50 MB(Installation space required) * Additional HDD space required for recording. Recorded file size will vary depending on recording quality settings.

▪ Even for computers of higher performance than recommended, you may experience frame skipping with the Web Viewer if the computer is overloaded showing more than 80% of CPU usage.

CONNECTING WEB VIEWER

1. Open your web browser and type the IP address or URL of DVR into the URL address box.

The basic URL of the DVR is as following in case of MAC address :

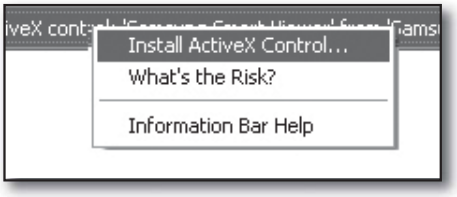
- 00-00-F0-ab-cd-ef : nabcdef.websamsung.net
- 00-16-6c-ab-cd-ef : mabcdef.websamsung.net
- 00-68-36-ab-cd-ef : pabcdef.websamsung.net
- 00-09-18-ab-cd-ef : iabcdef.websamsung.net
- You can also use registered URL which setups up in the Setup menu of your DVR.

2. Set the Admin ID and password same to those of the DVR Admin.
For general users, enter the DVR user ID and password.

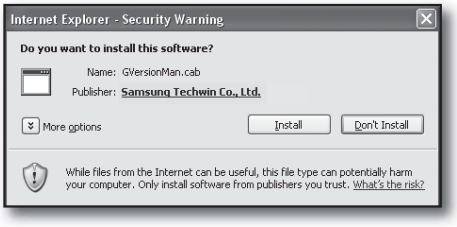
- The default password can be exposed to a hacking thread so it is recommended to change the password after installing the product.
  Note that the security and other related issues caused by the unchanged password shall be responsible for the user.

- It allows up to 10 simultaneous access including the Admin and general users.
- It does not allow multiple login of the Admin user.
- Initial password of the Admin user is set to "4321".
- Password of the Admin and general users can be changed in <**Permission Management**> menu of the DVR.
- Normal users should have set <**Viewer**> under <**Permission Management**> to "Use" before connecting to the Web Viewer. (Page 34)
- All settings are applied by the DVR's settings.

3. Click <**Install ActiveX Control…**>.
Downloading Active-X control may take several minutes according to the security settings on your PC.



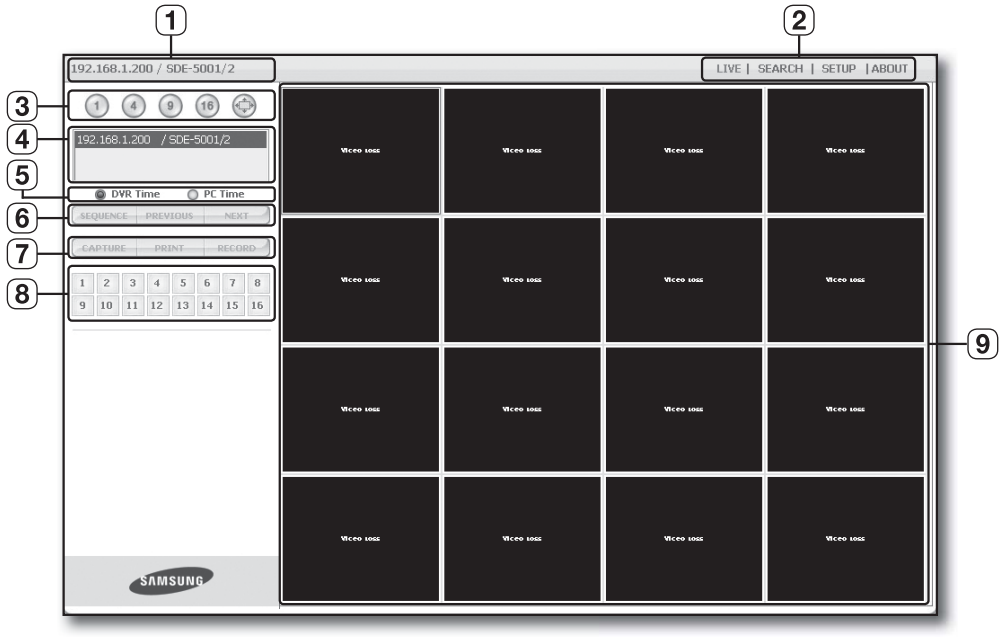
4. Click <**Install**>.


Internet Explorer - Security Warning
Do you want to install this software?
Name: GVersionMan.cab
Publisher: Samsung Techwin Co., Ltd.
More options
Install
Don't Install
While files from the Internet can be useful, this file type can potentially harm your computer. Only install software from publishers you trust. What's the risk?

5. You may have "**Windows Security Alert**" that attempts to block this with the Windows Firewall. In that case, click <**Unblock**> to start Web Viewer.
6. Installation is complete.
   Now you can see the main screen of Live Viewer.

Windows Security Alert
To help protect your computer, Windows Firewall has blocked some features of this program.
Do you want to keep blocking this program?
Name: Internet Explorer
Publisher: Microsoft Corporation
Keep Blocking
Unblock
Ask Me Later
Windows Firewall has blocked this program from accepting connections from the Internet or a network. If you recognize the program or trust the publisher, you can unblock it. When should I unblock a program?

USING LIVE VIEWER

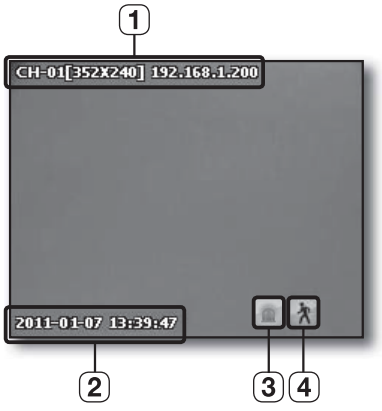


The Live Viewer screen consists of following :

① This displays the IP address and the model name of the connected DVR.
② These menus consist of <**LIVE**>, <**SEARCH**>, <**SETUP**>, <**ABOUT**>.
③ These buttons are used for the screen split and full screen mode.
④ Shows the IP address and model name of the connected DVR.
⑤ Select <**DVR Time**> or <**PC Time**> for the OSD time information display setting of the Live Viewer.
⑥ These buttons are used for sequence and changing the screen channel.
⑦ These buttons are used for capture, print, and save the image.
⑧ Shows the channel of the connected DVR.
⑨ This displays the screen for connected camera with DVR.

- The resolution is set to 1024X768 pixels.
- The initial split-screen mode is set according to the number of channels connected to DVR. You can change the split-screen mode by clicking buttons for split-screen modes.

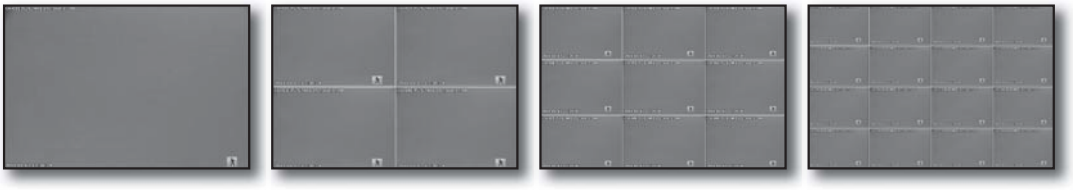
OSD INFORMATION DISPLAY



1. The channel number, video size, and IP address of the connected DVR are displayed.
2. The current date and time will be displayed according to the selected time information display setting <**DVR Time**> or <**PC Time**>.
3. Alarm icon appears when alarm is issued.
   It disappears when pressed the [**ALARM**] button of the DVR.
4. Motion icon appears when motion is detected.
   It disappears when pressed the [**ALARM**] button of the DVR.

SPLIT-SCREEN

You can change the split mode by clicking each number icon.



SINGLE MODE | QUAD MODE | NINE MODE | SIXTEEN MODE

- Click <1> button.
  The screen displays the selected camera connected to the DVR in "**SINGLE MODE**".
- Click <4> button.
  The screen displays the selected camera connected to the DVR in "**QUAD MODE**".
- Click <9> button.
  The screen displays the selected camera connected to the DVR in "**NINE MODE**".
- Click <16> button.
  The screen displays the selected camera connected to the DVR in "**SIXTEEN MODE**".
  SDE-4001 doesn't support 16-split screen mode.
- Click <⊕> button.
  The screen displays the selected camera connected to the DVR in "**FULL SCREEN MODE**".
  Double clicking on the screen or pressing any button of the keyboard returns to the previous mode.

CONNECTED DVR

This displays the IP address and the status of the connecting DVR.

- Connection failure message
  No Response : Appears when the DVR does not respond.
  Access Denied : Appears when the maximum number of users is exceeded.
- The number of simultaneous connections are limited to 10.

Setting the display of the OSD time information

Select <**DVR Time**> or <**PC Time**> for the OSD time information display setting.

- **DVR Time** : Based on the time of the connected DVR
- **PC Time** : Based on the time of the PC currently running the Web Viewer.

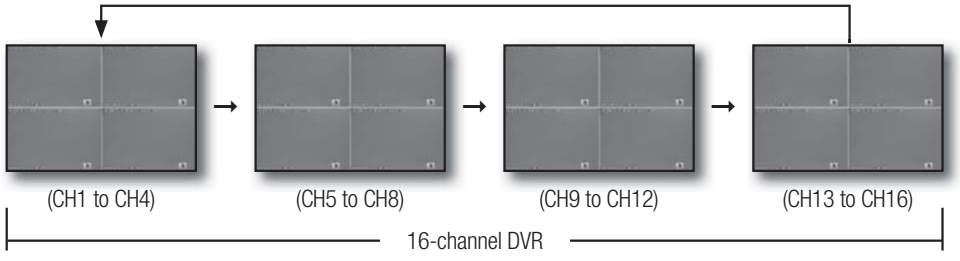
CHANGING THE LIVE SCREEN MODE

- 16-split mode does not support "**SEQUENCE**", "**PREVIOUS**" and "**NEXT**".

- **SEQUENCE** : When this button is clicked, screens are switched at a preset interval.
  In SINGLE MODE, the channel numbers are sequentially switched from 1 to 16.
  In QUAD MODE, the screens are changed like 1st 4 channels (1~4) → 2nd 4 channels (5~8) → 3rd 4 channels (9~12) → 4th 4 channels (13~16).
  In NINE MODE, the screens are changed from 9 channels (1~9) to 7 channels (10~16).
  In SIXTEEN MODE, the screen refreshes at the preset interval.
  - Preset interval (10 seconds)

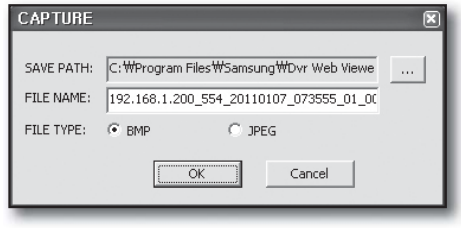
- **PREVIOUS** : When this button is clicked, the previous screen appears.
  In SINGLE MODE, the channel numbers are switched in reverse order.
  In QUAD MODE, the screens are changed like 1st 4 channels (1~4) → 2nd 4 channels (13~16) → 3rd 4 channels (9~12) → 4th 4 channels (5~8).
  In NINE MODE, the screens are changed from 9 channels (1~9) to 7 channels (10~16).
  In SIXTEEN MODE, the screen is refreshed.

- **NEXT** : When this button is clicked, the next screen appears.
  In SINGLE MODE, the channel numbers are sequentially switched from 1 to 16.
  In QUAD MODE, the screens are changed like 1st 4 channels (1~4) → 2nd 4 channels (5~8) → 3rd 4 channels (9~12) → 4th 4 channels (13~16).
  In NINE MODE, the screens are changed from 9 channels (1~9) to 7 channels (10~16).
  In SIXTEEN MODE, the screen is refreshed.
  - If 16-channel DVR is connected, clicking "**NEXT**" in QUAD MODE is to change the screen as shown in the picture.



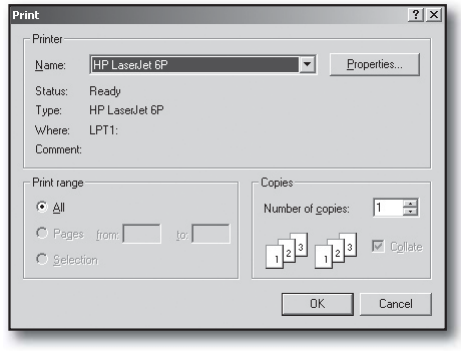
SAVING THE LIVE SCREEN ON THE PC

- **CAPTURE** : Saves the current screen into a BMP or JPEG file.

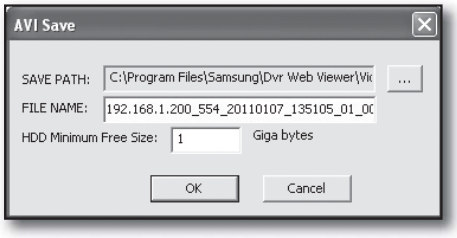


  - The default saving path is "C:\Program Files\Samsung\Dvr Web Viewer\SnapShot\Live". To change the saving path, click <**SAVE PATH** (...)> button and then select the path you want. For Windows Vista, the saving path is "C:\users\(user ID)\AppData\LocalLow\Samsung\DVR Web Viewer\Snapshot\" by default.
  - The file is automatically named as following : "IP address_Port number_YYYYMMDD_camera number_index"
    Ex) 192.168.1.200_554_20110107_073555_01_00

- **PRINT** : Prints out the selected screen out of the currently displayed live screens. It also prints the IP address, time, camera number and the current event status together.



- **RECORD** : Saves the current image on the screen and saves it as a avi video file.



- To record it, it is required at least 1GB of available space.
- The default saving path is "C:\Program Files\Samsung\Dvr Web Viewer\VideoClip\Live". To change the saving path, click <**SAVE PATH** (...)> button and then select the path you want. For Windows Vista, the saving path is "C:\users\(user ID)\AppData\Local-Low\Samsung\DVR Web Viewer\VideoClip\".
- The file is automatically named as following : "IP address_Port number_YYYYMMDD_camera number_index" Ex) 192.168.1.200_554_20110107_135105_01_00
- For AVI Save, you need the Xvid codec for playing saved files.
- HDD Minimum Free Size : During the recording, if there is no more capacity available in the HDD than set free space will prompt with a popup message : "**Cannot record due to insufficient disc space in the HDD**".

CHANGING THE LIVE SCREEN CHANNEL

- Blue numbers : The channel connected to the current live screen
- Gray numbers : The channel not connected to the current live screen

USING SEARCH VIEWER

The Search Viewer screen consists of following :

1. This displays the IP address and the model name of the connected DVR.
2. These menus consist of <**LIVE**>, <**SEARCH**>, <**SETUP**>, <**ABOUT**>.
3. These buttons are used for the screen split and full screen mode.
4. Shows the IP address and model name of the connected DVR.
5. These buttons are used for capture, print, and save the image.
6. This displays a calendar at which you can search the recorded video.
7. This displays a timeline at which you can search the recorded video by the time.
8. These buttons are used for controlling playback.
9. This displays the screen for playback of recorded video.

- <**SEQUENCE**>, <**PREVIOUS**>, <**NEXT**> buttons are not available in SEARCH menu.

- Depending on the currently set bandwidth, number of channels, and the quality of recorded data, playback may not go smoothly.

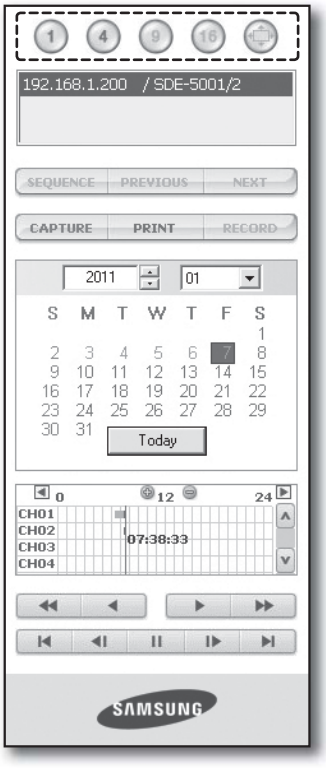
SPLIT-SCREEN

You can change the split mode by clicking each number icon.

SINGLE MODE

QUAD MODE

- Click <1> button.
  The screen displays the selected camera connected to the DVR in "**SINGLE MODE**".
- Click <4> button.
  The screen displays the selected camera connected to the DVR in "**QUAD MODE**".



- Only SINGLE and QUAD MODE are available in SEARCH menu.

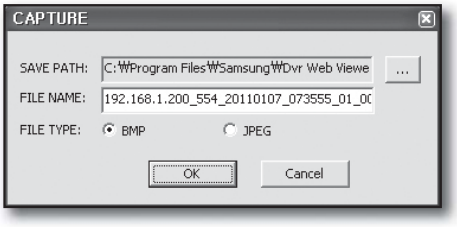
CONNECTED DVR

This displays the IP address and the status of the connecting DVR.

- Connection failure message
  No Response : Appears when the DVR does not respond.
  Access Denied : Appears when the maximum number of users is exceeded.
- The number of simultaneous connection is limited to 3.

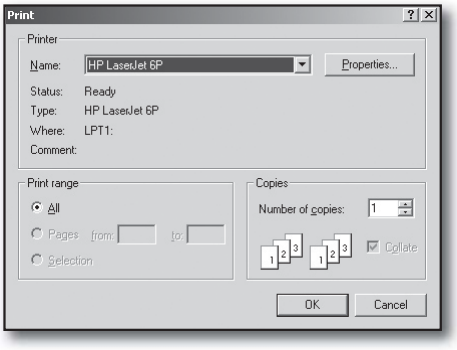
SAVING THE LIVE SCREEN ON THE PC

- **CAPTURE** : Saves the current screen into a BMP or JPEG file.

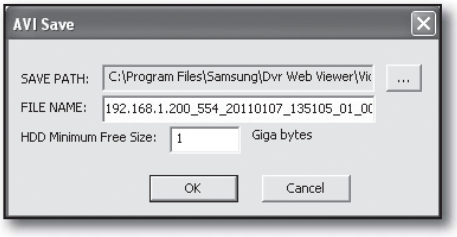


  - The default saving path is "C:\Program Files\Samsung\Dvr Web Viewer\SnapShot\Search". To change the saving path, click <**SAVE PATH** (...)> button and then select the path you want. For Windows Vista, the saving path is "C:\users\(user ID)\AppData\LocalLow\Samsung\DVR Web Viewer\Snapshot\".
  - The file is automatically named as following : "IP address_Port number_YYYYMMDD_camera number_index"
    Ex) 192.168.1.200_554_20110107_073555_01_00

- **PRINT** : Print out the current screen. It also prints IP address, time, camera number and current event state.



- **RECORD** : While in playback, press this button saves the video data of the selected channel as an AVI file. (It is saved in the designated folder on your PC.)
  To stop recording, click this button again.



  - To record it, it is required at least 1GB of available space.
  - The default saving path is "C:\Program Files\Samsung\Dvr Web Viewer\VideoClip\Search". To change the saving path, click <**SAVE PATH** (...)> button and then select the path you want. For Windows Vista, the saving path is "C:\users\(user ID)\AppData\LocalLow\Samsung\DVR Web Viewer\VideoClip\".
  - The file is automatically named as following : "IP address_Port number_YYYYMMDD_camera number_index"
    Ex) 192.168.1.200_554_20110107_135105_01_00
  - For AVI save, you need the Xvid codec for playing saved files.

SEARCHING THE RECORDED VIDEO IN THE CALENDAR

If the video data has been recorded on a date, the date is distinguished in green. If you click the date, the recorded video information is displayed in the time line. When you click <**Today**>, it will be synchronized with the system time (date) of the current PC.

SEARCHING THE RECORDED VIDEO IN THE TIMELINE

It displays the recorded video data status on the DVR after a date is selected. The normal mode displays the time ranging from 0 to 24 Hours while the extension mode displays the time every 2 hours.

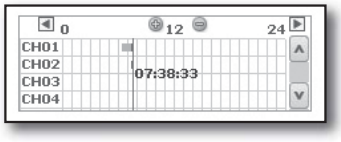
[Normal Mode]

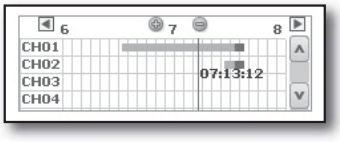
- If you click <⊕> button, it changes to the extension mode.
- Each time line represents 1 hour.

[Extension Mode]

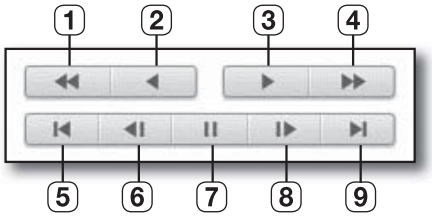
- If you click <⊖> button, it changes to the normal mode.
- Each time line represents 5 minutes.

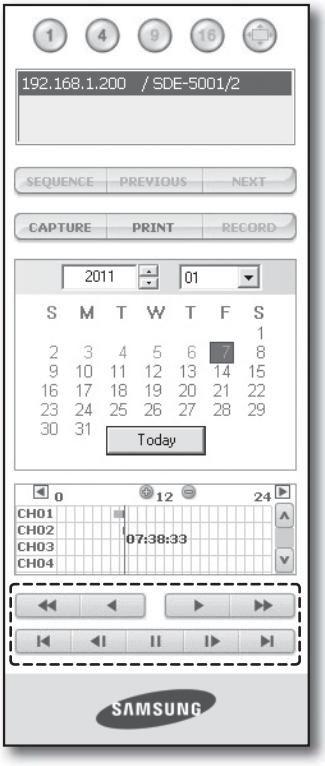
▪ For SDE-5001P, channels are ranging from CH01 to CH16.
For SDE-4001P, channels are ranging from CH01 to CH08.





CONTROLLING PLAYBACK





1. **Fast Backward** : Reverse-plays faster(2x).
2. **Reverse Play** : Performs Reverse Play.
3. **Play** : Performs playback.
4. **Fast Forward** : Plays faster(2x).
5. **Go to First** : Moves the beginning time of recorded video in the time line.
6. **Step Backward** : Performs one step reverseplay by one frame.
7. **Pause** : Stops the playback temporarily.
8. **Step Forward** : Performs one step forward by one frame.
9. **Go to Last** : Moves the last time of recorded video in the time line.

VIEWER SETUP

You can configure the DVR settings remotely on the network.
To configure the DVR settings, click <**Setup**>.

System

You can configure the various settings of the DVR system.

Date/Time/Language

For more information, refer to <**Date/Time/Language**> in the <**System Setup**> menu. (Page 32)

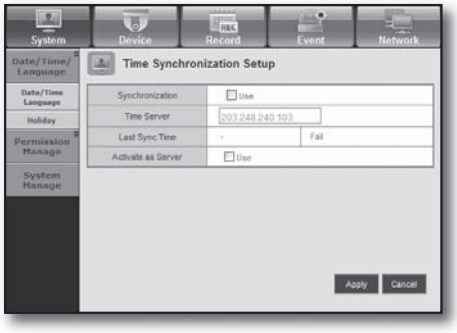
1. Select <**Date/Time/Language**> in the System menu.
2. Configure the DVR settings according to your system environment.

- **Date/Time**

Set the date and time.

• **Time Synchronization Setup**

Set the time synchronization.



• **Display**

Date Format : Set the date type.

Time : Select a time format to display on the screen.

• **DST (Daylight Saving Time)**

DST is displayed an hour ahead of the standard time of the time zone.

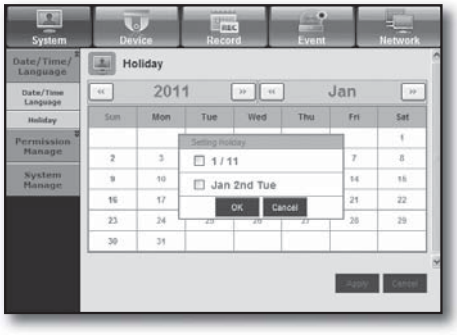
• **Language**

Select a preferred language for the DVR.

Holiday

You can set specific dates to Holidays according to your preferences.

For more information, refer to <**Setting Holiday**> in the <**System Setup**> menu. (Page 33)

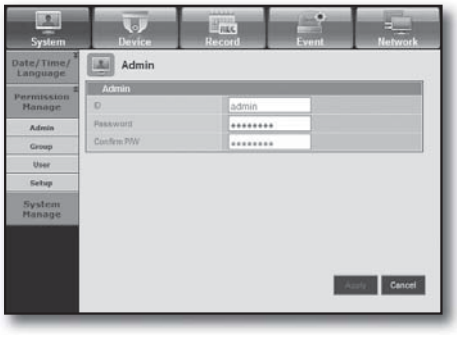


Permission Management

For more information, refer to <**Permission Management**> in the <**System Setup**> menu. (Page 34)

• **Admin**

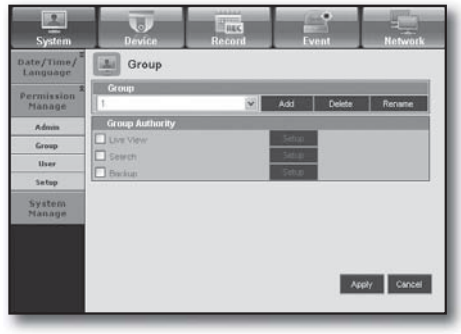
You can change the admin ID or the password.



• **Group**

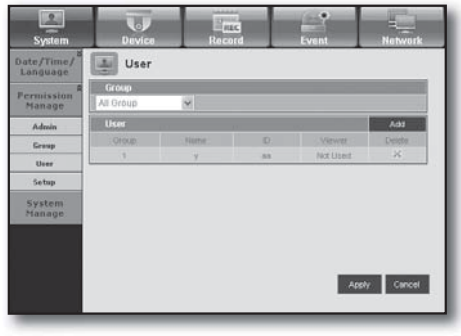
Users are classified into groups and the permission can be set according to the group.

- First of all, add a group.



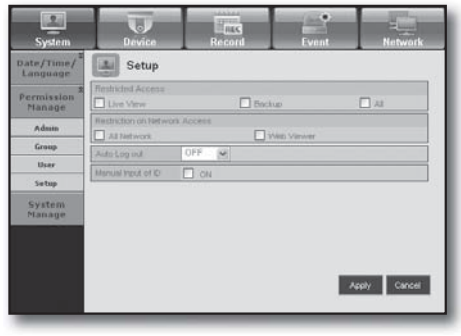
• **User**

You can add, change or remove a user or users.



• **Setup**

You can set the user permission.



System Management

For more information, refer to <**System Management**> in the <**System Setup**> menu. (Page 38)

• **System Information**

You can see information of the current system. Check the software version, broadcast format and MAC address.

Device

You can check a list of devices that are connected to the DVR and configure the necessary settings.
Click <**Device**> in the menu screen.
For more information, refer to "**Setting the Device**". (Page 42)

Camera

• **Camera**

You can configure the settings of the camera that is connected to the DVR.

Storage Device

You can check and change the settings of the storage device.

• **Device**

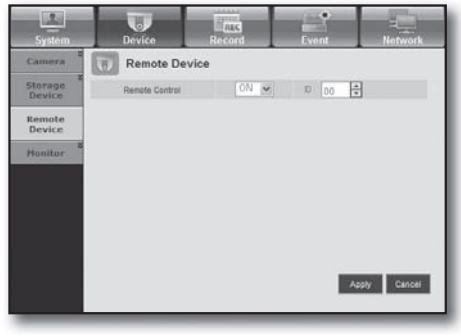
You will see a list of storage devices that are connected to the DVR.
You can check the type, used/total, usage and status of the device.

• **HDD Alarm**

You can set the alarm output channel and the alarm duration for an error.

Remote Device

You can specify the Remote Control ID for the device that is connected to the DVR.



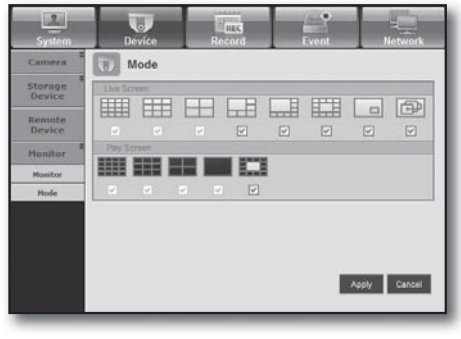
Monitor

- **Monitor**

You can configure the monitoring screen settings and set the output system.

- **Mode**

You can switch between live mode and play mode.

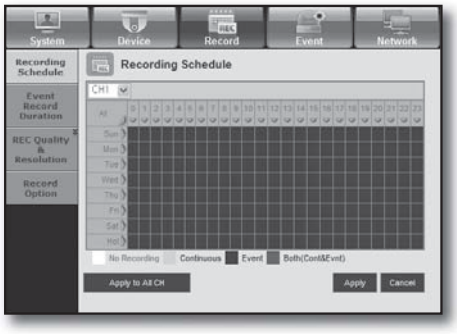


Record

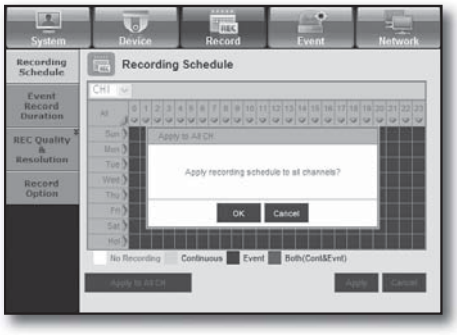
For more information, refer to "**Setting the Recording**". (Page 48)

Recording Schedule

If you set a recording schedule for a specific date and time, the recording will start at that specific time.



- Apply to All CH : Click <**Apply to All CH**> to display the confirmation window.



Event Record Duration

You can set the start and end times of recording that will be activated if an event occurs.

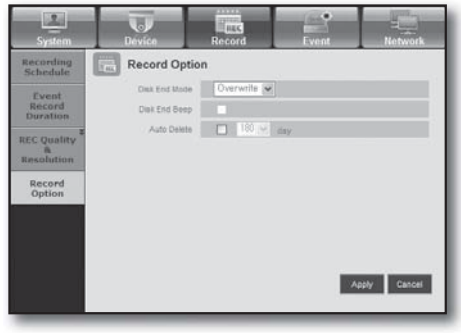
REC Quality & Resolution

- **Standard/Event**

You can set the resolution, frame rate and recording quality for each channel.

Record Option

You can set the Disk End Mode.



Event

For more information, refer to "**Setting the Event**". (Page 51)

Sensor Detection

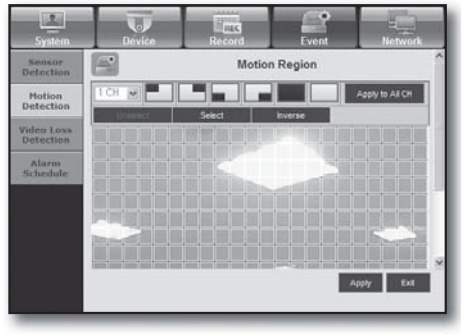
You can set the sensor operation mode and the synchronized camera as well as the alarm output type and the duration.

Motion Detection

You can set the motion detection mode and the sensitivity as well as the alarm output type and the duration.

- **Motion Region**

Set the target motion detection area

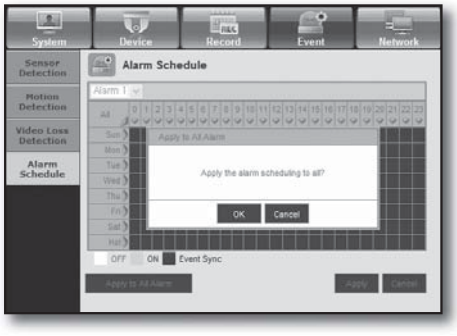


Video Loss Detection

You can set the alarm output time if a video loss occurs.

Alarm Schedule

You can schedule the alarm output according to the day of the week and the time.
The default setting is Event Sync, which activates the alarm only if an event occurs.



Network

For more information, refer to "**Network Configuration**". (Page 55)

Connection

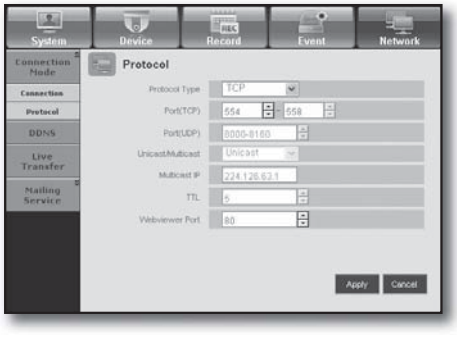
A remote user can access the DVR via the network to check the current mode and the IP address.

- **Connection**

You can set the network connection route.

- **Protocol**

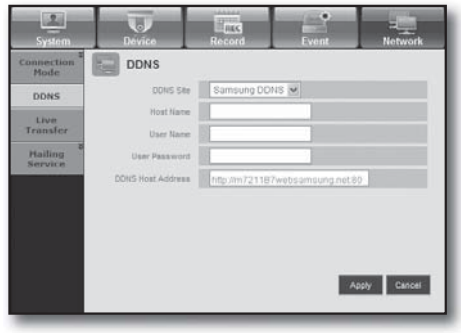
You can configure the protocol related settings.



DDNS

You can check the DDNS settings.

- DDNS Host Address only appears when Samsung DDNS is selected.

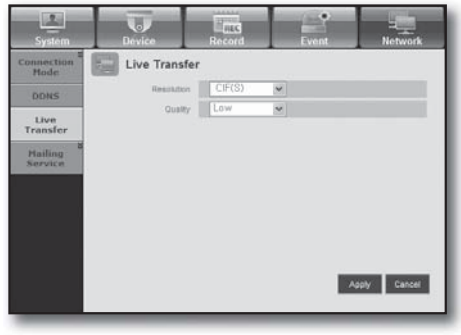


Live Transfer

A remote user can set the images of the DVR.

• Live Transfer

A remote user can set the image resolution of the transferred data.

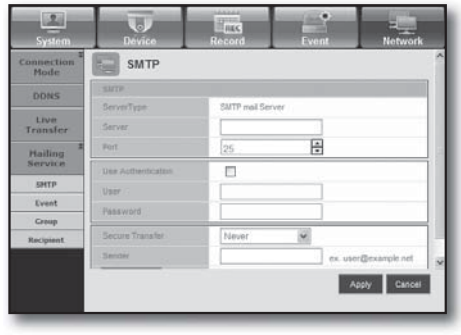


Mailing Service

You can specify the SMTP server that sends a mail if an event occurs and set the recipient group and users.

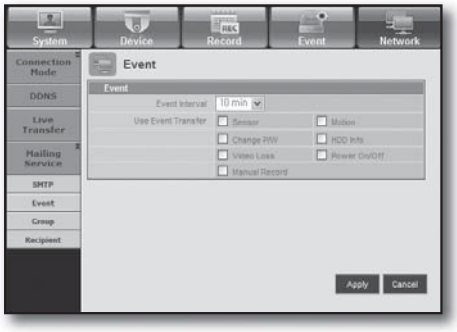
• SMTP

You can set the server that sends mails and specify if you use the authentication process.



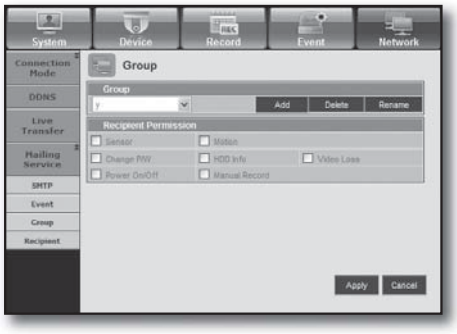
• **Event**

You can set the event interval and specify which events the server sends mails for.



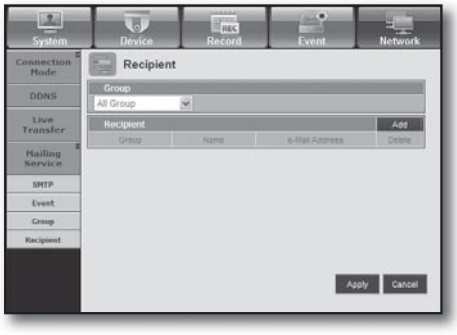
• **Group**

You can add a group to receive the mail if an event occurs and set the permission to receive the event mail for each group.



• **Recipient**

You can add a user or users who will receive the mail.



ABOUT

Click <**ABOUT**>.

Displays the model name of connected DVR and the version of Web Viewer.

MOBILE VIEWER

What is Mobile Viewer?

Mobile Viewer is management software that enables you to connect to DVR (Digital Video Recorder) remotely.

Key Features

- Remote access via Smart phone
- 1-split and 4-split modes supported in Live Viewer (However, search is not available).
- Switch channels using the touch-sensitive LCD panel
- Up to 16 channels supported

Supported Smart phone

- iPhone3G
- iPhone4G

backup viewer

SEC BACKUP VIEWER

You can play a file that is backed up in the format of SEC.
Backup in the format of SEC will involve in generating two files: one for the backup data and one for the viewer.
If you run the backup file viewer, the backup data file will be automatically played.

Recommended System Requirements

PCs with a lower specification than the recommended below may not fully support forward/backward and high-speed playback.

- OS : Windows XP professional, Windows Vista, Windows 7
- CPU : Intel Core2-Duo 2.4GHz or higher
- RAM : DDR PC-3200 1G or more
- VGA : Geforce 6200 or higher

backup viewer

Name			Description
1	Audio		A toggle button. Each time you press this button, the audio output will toggle between activated and deactivated.
			You can adjust the volume level from 0 to 100.
2	Screen Printout		Saves the current screen as an image file. Supported file formats include BMP and JPEG.
			Prints out the current screen. You should have installed the appropriate printer driver before you can print out the screen.
3	File Tamper Detection		A toggle button. Each time you press this button, it will toggle between activated and deactivated. The closed lock icon indicates activation of the file tamper detection, which will blink the screen three times and stop playing if an unauthorized manipulation of a data file is detected. ▪ A message of "The file is forged" will display in the menu bar.
4	Deinterlace		You can enable the De-interlace function.
5	Zoom In/Out		Collapses the time range that is displayed on the range bar of the storage time. You can collapse the range bar until the overall range is shortened to 24 hours.
			Enlarges the time range that is displayed on the range bar of the storage time. You can enlarge the range bar until the overall range is extended to 1 minute.
6	Display of storage time range		Displays the time range of a stored video file. You can move the gridline of the range bar to select a time point to play.
7	Speed		A toggle button; each time you press this button, the "Slow Playback " icon changes its color to display it's activated/deactivated. If it is activated, you can use the play speed control to adjust the play speed up to x1/16 forward and backward respectively, whereas if deactivated, you can adjust up to x16 forward and backward.
			A toggle button; each time you press this button, the "Lock Speed" icon changes its color to display it's activated/deactivated. If activated, the adjusted speed will be kept even if you release the mouse on the speed bar. If deactivated, the adjusted speed will be applied only while you use the mouse to hold the adjusted speed, and if you release the mouse, the speed will restore to x1.
			You can adjust the play speed up to x16 forward and backward respectively, which varies according to the frame rate per second of the source. Fast playback maximum is limited to x2 for footages recorded at 20 ~ 30 ips (frames per second), x4 for 11 ~ 19 ips, x8 for 6 ~ 10 ips, and x16 for footages recorded at slower than 6 ips.
8	Play		Displays the next frame. This is available only if the playback is stopped.
			A toggle button. Press it once to start playing the video and switch the button mode to 'Pause', and press it again to switch the button mode to Play and stop playing temporarily.
			Displays the previous frame. This is available only if the playback is stopped.

PRODUCT SPECIFICATION (CAMERA)

Item	Details			
	SEB-1005R N	SEB-1005R P	SED-1001R N	SED-1001R P
Electrical				
Input Voltage	DC 12V(by UTP)	DC 12V(by UTP)	DC 12V(by UTP)	DC 12V(by UTP)
Power Consumption	2.6W	2.6W	2.2W	2.2W
Video				
Imaging Device	MT9V138	MT9V138	MT9V138	MT9V138
Total Pixels	680 x 512	680 x 512	680 x 512	680 x 512
Scanning System	Interlace	Interlace	Interlace	Interlace
Synchronization	Internal	Internal	Internal	Internal
Frequency	H: 15,734 Hz	H: 15,625 Hz	H: 15,734 Hz	H: 15,625 Hz
	V: 59.94 Hz	V: 50 Hz	V: 59.94 Hz	V: 50 Hz
Horizontal Resolution	520TVL	520TVL	520TVL	520TVL
Min. Illumination	0Lux (IR-LED)	0Lux (IR-LED)	0Lux (IR-LED)	0Lux (IR-LED)
S/N Ratio (Y Signal)	46dB	46dB	46dB	46dB
UTP	Built-in UTP TX			
	Maximum Transmission Length: 200m (UTP CAT 5e)			
	Balanced Differential Impedance: 100 ohm			
Lens				
Focus Length	3.8mm	3.8mm	3.8mm	3.8mm
Max.Aperture Ratio	2	2	2	2
Angular Field of View	H: 54˚	H: 54˚	H: 54˚	H: 54˚
	V: 40˚	V: 0˚	V: 40˚	V: 40˚
Operational				
Shutter Mode	Auto(Rolling Shutter)	Auto(Rolling Shutter)	Auto(Rolling Shutter)	Auto(Rolling Shutter)
Gain Control	Auto	Auto	Auto	Auto
White Balance	Auto (3200°K~6500°K)	Auto (3200°K~6500°K)	Auto (3200°K~6500°K)	Auto (3200°K~6500°K)
Digital Noise Reduction	Auto	Auto	Auto	Auto
Day & Night	Auto	Auto	Auto	Auto
IR Distance	15m(20EA)	15m(20EA)	10m(12EA)	10m(12EA)

appendix

Item	Details			
	SEB-1005R N	SEB-1005R P	SED-1001R N	SED-1001R P
Environmental				
Operating Temperature/ Humidity	0°C ~ +40°C (+32°F ~ +104°F) / 20% ~ 85% RH	0°C ~ +40°C (+32°F ~ +104°F) / 20% ~ 85% RH	0°C ~ +40°C (+32°F ~ +104°F) / 20% ~ 85% RH	0°C ~ +40°C (+32°F ~ +104°F) / 20% ~ 85% RH
Mechanical				
Dimension (W x H x D)	W65.5 X H65.5 X D94.6	W65.5 X H65.5 X D94.6	W102 X H71.7	W102 X H71.7
Weight	300g	300g	160g	160g

PRODUCT SPECIFICATION (SDE-4001)

Item		Details
Video	Inputs	8 UTP Line(CH1~CH8), BNC 2 ports(CH1, CH2)
	Resolution	704x480 NTSC, 704x576 PAL
Live	Frame rate	30ips NTSC, 25ips PAL
	Resolution	704x480 NTSC, 704x576 PAL
	Multi Screen display	1, 4, 6, 8, 9, 13, PIP
Performance		
Operating System	Embedded	Linux
Recording	Compression	H.264
	Record Rate	NTSC: Up to 60ips @ 704x480 / PAL: Up to 50ips @ 704x576
		NTSC: Up to 120ips @ 704x240 / PAL: Up to 100ips @ 704x288
		NTSC: Up to 240ips @ 352x240 / PAL: Up to 200ips @ 352x288
	Mode	NTSC: Manual, Schedule, Event
		PAL: Manual, Schedule, Event
	Overwrite modes	Continuous
	Pre-event	Off/5/10/20/30sec
	Post-event	- Off/5/10/20/30sec - 1/3/5/10/20min, 1/2/3/4/5/6 hour
Search & Playback	Search mode	Date/time, Event, Backup, Motion (※ All Search contains the Preview function)
	Playback function	Fast Forward/Backward, Slow Forward/Backward, Step Forward/Backward
Network	Transmission speed	Up to 8Mbps, Unlimited(8Mbps)/2/1.5/1 Mbps/800/600/500/400/300/200/100/50 kbps
	Stream	H.264(CIF)
	Maximum No. of remote users	Search(3) / Live Unicast(10) / Live Multicast(20)
	Protocol support	TCP/IP, DHCP, PPPoE, SMTP, NTP, LIGHTTPD & UDP, DDNS, RTP, RTSP
	Monitoring	Smart viewer, Webviewer, Mobile Viewer
Storage	Internal HDD	1TB SATA HDD
	External HDD	–
	DVD Writer (Back-up)	–
	USB (Back-up)	2 USB Ports
	File Format (Back-up)	AVI, SEC, DVR
Security	Password Protection	1Admin, 10 Group, 10 User per 1 Group, User can be assigned authority for function
	Data Authentication	Watermark (Only supports in SEC backup viewer)

appendix

Item		Details
Interface		
Monitors	VGA	Analog RGB 800x600, 1024x768, 1280x1024 resolution
	HDMI	–
	Main Composite	BNC, 1 Vp-p, 75 ohm
	Spot Composite	–
	Loop Outputs	–
Audio	Inputs/Output	8 UTP Line(CH1~CH8), 2 Port RCA(CH1, CH2) / 1 line out
	Compression	ADPCM
	Sampling rate	16KHz
Alarm	Inputs/Outputs	Terminal 4 inputs (NO/NC) / Terminal 1 relay outputs (NO/NC), Rating: 30V DC/2A, 125V AC/0.5A
	Remote notification	Notification via e-mail
Connections	Ethernet	1 RJ-45 10/100 Base-T
	Serial interface	–
	USB	USB 2.0, 2 ports
	e-SATA	–
	Application Supoort	Mouse, Remote Controller
	Protocol support	–
General		
Electrical	Input Voltage/Current	100 ~ 240 VAC ±10%; 50/60 Hz, Autoranging
	Power consumption	ADP-4812 Adaptor (2EA), 12V, 48W+48W
Environmental	Operating Temperature/ Humidity	0°C ~ +40°C (+32°F ~ +104°F) / 20% ~ 85%RH
Mechanical	Dimension (W x H x D)	350 X 44 X 300mm
	Weight (With hard disks)	2.83kg
Lauguage		English, Spanish, French, German, Italian, Polish, Portuguese, Russian, Turkish, Japanese, Czech, Swedish, Danish, Korean, Chinese, Netherland, Thai, Romanian, Serbian, Croatian, Hungarian, Greek

PRODUCT SPECIFICATION (SDE-5001)

Item		Details
Video	Inputs	16 UTP Line(CH1~CH16), BNC 2 ports(CH1, CH2)
	Resolution	704x480 NTSC, 704x576 PAL
Live	Frame rate	30ips NTSC, 25ips PAL
	Resolution	704x480 NTSC, 704x576 PAL
	Multi Screen display	1, 4, 6, 8, 9, 13, 16, PIP
Performance		
Operating System	Embedded	Linux
Recording	Compression	H.264
	Record Rate	NTSC: Up to 120ips @ 704x480 / PAL: Up to 100ips @ 704x576
		NTSC: Up to 240ips @ 704x240 / PAL: Up to 200ips @ 704x288
		NTSC: Up to 480ips @ 352x240 / PAL: Up to 400ips @ 352x288
	Mode	NTSC: Manual, Schedule, Event
		PAL: Manual, Schedule, Event
	Overwrite modes	Continuous
	Pre-event	Off/5/10/20/30sec
	Post-event	- Off/5/10/20/30sec - 1/3/5/10/20min, 1/2/3/4/5/6 hour
Search & Playback	Search mode	Date/time, Event, Backup, Motion (※ All Search Included Prview Function)
	Playback function	Fast Forward/Backward, Slow Forward/Backward, Step Forward/Backward
Network	Transmission speed	Up to 8Mbps, Unlimited(8Mbps)/2/1.5/1 Mbps/800/600/500/400/300/200/100/50 kbps
	Stream	H.264(CIF)
	Maximum No. of remote users	Search(3) / Live Unicast(10) / Live Multicast(20)
	Protocol support	TCP/IP, DHCP, PPPoE, SMTP, NTP, LIGHTTPD & UDP, DDNS, RTP, RTSP
	Monitoring	Smart viewer, Webviewer, Mobile Viewer
Storage	Internal HDD	1TB SATA HDD
	External HDD	–
	DVD Writer (Back-up)	–
	USB (Back-up)	2 USB Ports
	File Format (Back-up)	AVI, SEC, DVR
Security	Password Protection	1Admin, 10 Group, 10 User per 1 Group, User can be assigned authority for function
	Data Authentication	Watermark (Only supports in SEC backup viewer)

appendix

Item		Details
Interface		
Monitors	VGA	Analog RGB 800x600, 1024x768, 1280x1024 resolution
	HDMI	–
	Main Composite	BNC, 1 Vp-p, 75 ohm
	Spot Composite	–
	Loop Outputs	–
Audio	Inputs/Output	16 UTP Line(CH1~CH16), 2 Port RCA(CH1, CH2) / 1 line out
	Compression	ADPCM
	Sampling rate	16KHz
Alarm	Inputs/Outputs	Terminal 4 inputs (NO/NC) / Terminal 1 relay outputs (NO/NC), Rating: 30V DC/2A, 125V AC/0.5A
	Remote notification	Notification via e-mail
Connections	Ethernet	1 RJ-45 10/100 Base-T
	Serial interface	–
	USB	USB 2.0, 2 ports
	e-SATA	–
	Application Supoort	Mouse, Remote Controller
	Protocol support	–
General		
Electrical	Input Voltage/Current	100 ~ 240 VAC ±10%; 50/60 Hz, Autoranging
	Power consumption	ADP-4812 Adaptor (2EA), 12V, 48W+48W
Environmental	Operating Temperature/ Humidity	0°C ~ +40°C (+32°F ~ +104°F) / 20% ~ 85%RH
Mechanical	Dimension (W x H x D)	350 x 44 x 300 mm
	Weight (With hard disks)	2.83kg
Lauguage		English, Spanish, French, German, Italian, Polish, Portuguese, Russian, Turkish, Japanese, Czech, Swedish, Danish, Korean, Chinese, Netherlands, Thai, Romanian, Serbian, Croatian, Hungarian, Greek

DEFAULT SETTING

This returns the factory default settings.

The settings are made as follows;

- Use System/Load Factory Default in MENU

■ The default settings are based on SDE-5001.

■ The default password can be exposed to a hacking thread so it is recommended to change the password after installing the product.
Note that the security and other related issues caused by the unchanged password shall be responsible for the user.

Category	Details			Factory Default
System Settings	Date/Time/Language	Date/Time/Language	Date	YYYY-MM-DD
			Time Format	24 hours
			Time Zone	GMT
			Time Synchronize	OFF
			DST	OFF
			Language	English
	Permission Management	Admin	ID	admin
			New Password	4321
		Setting	Restricted Access	Backup
			Auto Logout	OFF
	System Management	System Information	Broadcast Format	NTSC/PAL
Device	Camera	Camera	Video	ON
			Audio	OFF
			CH Name	CAM 01 ~ CAM 16
			SEQ-Dwell Time	5sec
		Screen Setup	Brightness	50
			Contrast	50
			Color	50
	Storage Device	HDD Alarm	Check Alarm Output Port	OFF
			Duration	OFF
			Replace Alarm Output Port	OFF
			Duration	OFF
	Remote Device	Remote Control		ON(00)

appendix

Category	Details			Factory Default
Device	Monitor	Monitor	Display	All
			Multi CH SEQ Time	5 sec
			VGA	800x600
			Sharpness	Level2(Low)
			Display Position Setup	30
		Mode	Live Mode	ALL
			Play Mode	ALL
Recording	Recording Schedule	Channel 1		Event
	Event Record Duration	PRE Event		OFF
		POST Event		1 min
	REC Quality/ Resolution	Standard	Resolution	CIF(S)
			Frame Rate	NTSC: 7.5 ips PAL: 6.2 ips
			Record Quality	Level 4
		Event	Resolution	4CIF(L)
			Frame Rate	NTSC: 7.5 ips PAL: 6.2 ips
			Record Quality	Level 4
	Record Option	Disk End Mode	Setup	Overwrite
			Disk End Beep	OFF
		Auto Delete		OFF
Event	Sensor Detection	Sensor Operation		OFF
		Camera		Camera No.
		Alarm		None
		Alarm Duration		10 sec
	Motion Detection	Mode		OFF
		Sensitivity		Level 10 High
		Alarm		None
		Alarm Duration		10 sec
		Motion Region		All Area

Category	Details			Factory Default
Event	Video Loss Detection	Video Loss State		OFF
		Alarm		None
		Alarm Duration		10 sec
	Alarm Schedule	Alarm1		Event Sync
Network	Connection Mode	Connection	Connection Mode	Static IP
			Bandwidth	2Mbps
			IP	192.168.1.200
			Gateway	192.168.1.1
			Subnet Mask	255.255.255.0
			DNS	168.126.63.1
		Protocol	Protocol Type	TCP
			Port (TCP)	554~558
			Webviewer Port	80
	DDNS	DDNS Site		OFF
	Live Transfer	Resolution		CIF(S)
		Quality		Low
	Mailing Service	SMTP	Server	OFF
			Port	25
			Use Authentication	OFF
			Secure Transfer	Never
		Event	Event Interval	10 min
			Use Event Transfer	OFF
		Group	Group	OFF
			Recipient Permission	OFF
		Recipient	Group	All Group

appendix

TROUBLESHOOTING

Symptom	Countermeasures
The system does not turn on and the indicator on the front panel does not work at all.	• Check if the power supply system is properly connected. • Check the system for the input voltage from the power source. • If the problem persists even after you have taken the above actions, check the power supplier and replace it with a new one if neccessary.
Some channels display just a black screen even if they receive video sources.	• Check if the camera connected to the system properly displays the image. Sometimes, this problem may occur on a camera that is not properly connected to the video source. • Check if the camera is properly supplied with power. • Sometimes, this problem may occur on a channel with weak video signal from a video distributor that is connected to multiple systems. In this case, input the video source of the camera directly into the DVR. This may find the cause and solve the problem.
If I press the [**REC**] button on the front panel, nor the player start recording.	• Check if there is a free space on the HDD for the recording. • Check if the record mode is set to **ON** in the record mode setting.
The screen displays the logo image repeatedly.	• This may occur from a problem with the main board, or the related software is corrupt. Contact the nearest service center for more information.
The Channel button does not work on the Live screen.	• The Channel button does not work if the current screen is in the event monitoring mode. In the event monitoring screen, press the [**ALARM**] button to exit the screen and select a channel.
The cursor will not move to the Start button when I start the calendar search.	• Check if the channel and the date that you want to play are marked with the V symbol. Both channel and date should be checked before you can start playing with the Start button.
When the alarm sounds, I press the [**ALARM**] button on the front panel to release the alarm but it does not work. The alarm persists and I could not set it off in any way.	• Press the [**MENU**] button on the front panel to release the alarm in the following way: 1) To release the event monitoring mode : Monitoring Mode – set the duration of the event monitoring to Off. 2) To release the alarm sound : Event Record Mode - Alarm (Motion Detection/Video Loss) – deactivate the alarm sound. 3) To release the event : Event Record Mode - Alarm (Motion Detection/ Video Loss) – set the mode to Off.

Symptom	Countermeasures
A message of “Need to reset date/time.” Is displayed on the screen.	• This message is displayed if there occurs a problem with the time setting of the internal clock or an error in the clock itself. Contact the retailer or the service center for more information.
The time bar is not displayed in Search mode.	• The timeline can switch between normal and extension mode. In extension mode, the time bar may not be displayed in the current timeline. Switch to normal mode or use the left or right button to navigate through the time bar.
The “NO HDD” icon and an error message are displayed.	• Check the HDD for connection. If the problem persists in a normal condition, contact the nearest service center to have the HDD checked by the service personnel.
I have installed an additional HDD on the DVR but it does not recognize the HDD.	• See the compatibilty list to check if the additional HDD is supported by the DVR. For the compatibility list, contact the retailer where you purchased the DVR.
I have connected an external storage device to the DVR but the DVR seems not to recognize it.	• See the compatibility list of external storage devices to check if the connected device is supported by the DVR. For the compatibility list, contact the retailer where you purchased the DVR.
If I press the ESC key in full screen mode of the WebViewer, the system does not switch to a normal split mode.	• Press the ALT+TAB keys to select ‘ACTIVE MOVIE’ and press the ESC key again. The system will switch to a normal split mode.
I found it difficult to configure the network settings if using the default search, backup and router settings.	• For more information, refer to the user manual. • If you want to check the basics of the product for a quick start, refer to the quick start guide (backup, search). • If you use the router for network connection, refer to the “**Connecting to the Internet using the router**” section in this manual.
I forgot the password.	• Contact the DVR administrator for help.
Backup data is just not played by the PC or DVR.	• When you are backing up data, you have choices about the player either: PC or DVR. Make your selection before proceeding. • If you are using the PC to play the data, the format of the backup file should be either AVI or SEC. • If you are using the DVR for this purpose, formatting backup files should be done by the DVR.
My player does not switch to Live mode while in playback.	• Press the Stop [■] button on the DVR or the remote control, or click the [■] icon on the launcher to switch to Live mode.

Symptom	Countermeasures
Recording does not work.	• If your player does not display a Live image at all, that indicates recording does not work so first check if you see an image on the screen. • Recording does not work if the recording settings are not properly configured. 1) Manual Record: Press the [**REC**] button on the front panel of the DVR or on the remote control to start recording. 2) Scheduled Record: Specify a desired time in Menu – Record - Recording Schedule. Recording will start at the specified time. - <**Continuous**> Record: Recording will proceed in any conditions at the specified time. - <**Event**> Record: When an event occurs, recording will perform only if the event is of alarm, motion detection and video loss. If there is no event found, recording will not perform. - <**Continuous / Event**> Record: If there is no event found, Continuous recording will perform. Whereas, if an event occurs, Event recording will perform.
The image quality of the recording data is not good.	• Increase the resolution and quality level in Menu – Record – Quality / Resolution. 1) Resolution: Select a bigger size when specifying the recording size. (4CIF>2CIF>CIF) The recording image in the CIF format shows a deteriorated quality as it is enlarged from a small-sized image. 2) Record Quality: Specify a bigger level for the recording quality. • If you increase the resolution and the recording quality, the data size increases accordingly. So the HDD will be filled faster. Overwriting will overwrite the existing data so recording will proceed at a shorter interval.

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This option is useful when you wish to copy part of the code of the Library into a program that is not a library.

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Otherwise, if the work is a derivative of the Library, you may distribute the object code for the work under the terms of Section 6. Any executables containing that work also fall under Section 6, whether or not they are linked directly with the Library itself.

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8 Channel/
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User Manual

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